NOVEMBER 1960

Traffic Safety

A NATIONAL SAFETY COUNCIL PUBLICATION

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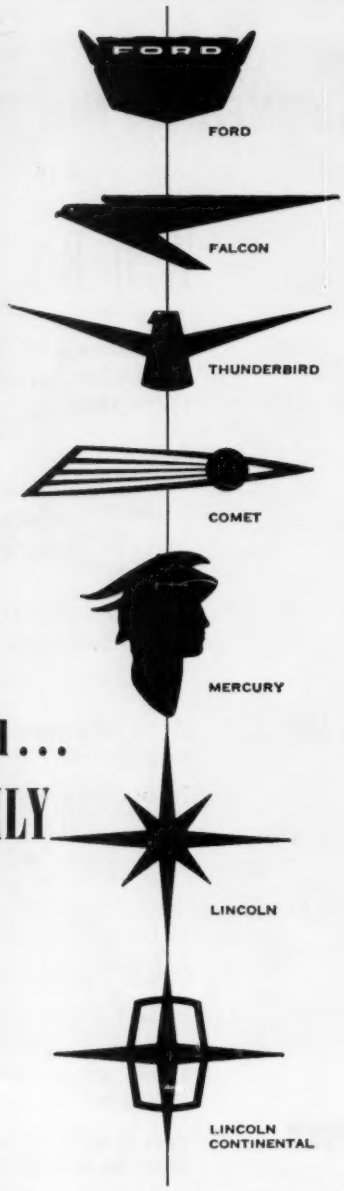

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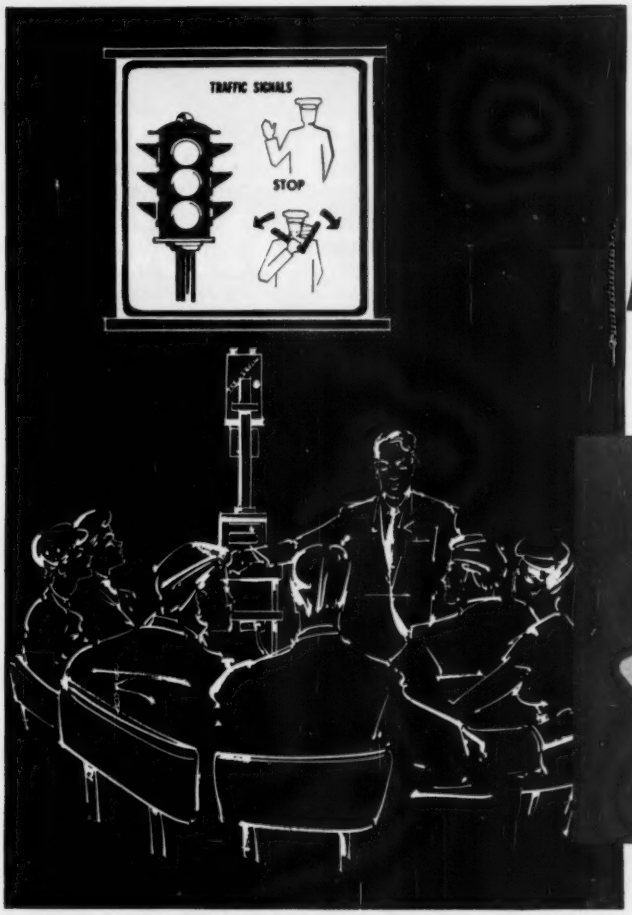

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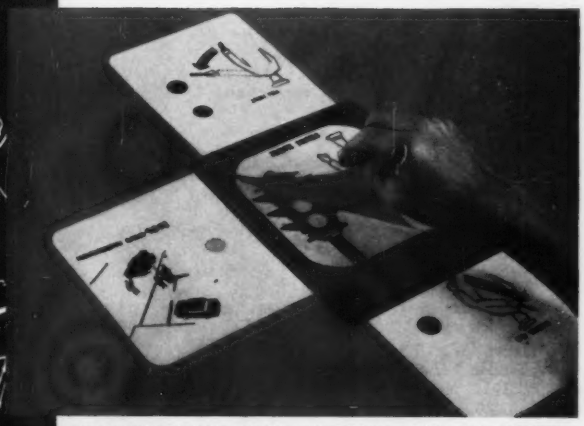

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THE SAFETY LIBRARY

(Monthly supplement to *Guide to Traffic Safety Literature*. Guide is available from NSC.)

by Lois Zearing, Librarian, NSC

Accidents

Focal Points of the Motor Vehicle Accident Problem. *Statistical Bulletin,* July, 1960, p. 6-8.

Automobiles

Everybody's Weapon. Part 2. Hal Higdon. *The Kiwanis Magazine,* August, 1960, p. 43-47.

(Automobile manufacturers vs. design and safety.)

Drivers and Driving

Careless Drivers Should Know Better. *Journal of American Insurance,* September, 1960, p. 6-8.

(Educating drivers in Chicago through the driver improvement school.)

How Safe Is Your Car? *California Highway Patrolman,* August, 1960, p. 14, 29.

(Gives some psychological causes of traffic accidents.)

Teenagers Who Do Care About Safety. Glen Dunkle. *Highway Highlights,* July-August, 1960, p. 16-17.

(High school students in Albuquerque are making their driver education course an important part of the curriculum.)

Engineering

Ten Years of Traffic Engineering Improvements (New York City—A Symposium) T. T. Wiley. *Street Engineering,* August, 1960, p. 37, 50-55, 63-64.

(Notable gains in traffic efficiency and safety have been accomplished in New York City by vigorous application of proven techniques and modern control equipment.)

Games

Fun on Wheels. Dave Garroway. Exclusive AAA Edition, 1960, 125 pp. Available from American Automobile Club, 1712 G. Street, N.W., Washington 6, D. C. Price $1.00

(This book contains 150 different suggestions on how to keep children entertained and safely inside the car. There are games, riddles, puzzles and tricks that require a minimum of space or equipment. The games have been carefully checked by the AAA for their safety factors.)

Highways

Hazardous Bridges Must Go. *Better Roads,* August, 1960, p. 28-30.

Reduce Cross-Median Accidents. *Engineering News-Record,* August 18, 1960, p. 26.

Legislation

Public Health and Traffic Safety. Daniel P. Moynihan. *International Road Safety and Traffic Review,* Summer, 1960 Vol. VIII, No. 3, p. 30-33.

(A talk given at the National Attorney's Association, March, 1960 in which the speaker proposed that traffic regulations be made a part of the public health code.)

Licensing

Federal Register of Revoked Licenses Ordered. *AAMVA Bulletin,* July, 1960, p. 1-2.

(The Congress passed a bill "to provide for a register in the Department of Commerce in which shall be listed the names of certain persons who have had their motor vehicle operators' licenses revoked.")

Lighting

Traffic Operations as Related to Highway Illumination and Delineation. Reported by Asriel Taragin and Burton M. Rudy. *Public Roads,* August, 1960, p. 59-66, 71.

(A cooperative investigation by Connecticut State Highway Department and the

To Page 42

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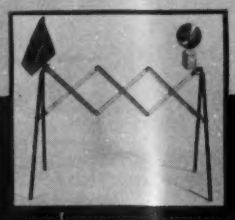

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Circle Item No. 5—Reader Service Card

Traffic Safety

Volume 57 Number 5 November 1960

A NATIONAL SAFETY COUNCIL PUBLICATION

IN THIS ISSUE:

Traffic Operations:

August Toll Drops Slightly . . . . *by H. Gene Miller* 8

Springfield Solves Tomorrow's Problems *Today* . . . . . *by Charles E. Aguar* 10

Trustees Award to New Jersey and Kalamazoo 13

Christmas Campaign Ready to Go 14

How Virginia Runs Successful Inspection Program *by R. B. King* 16

Roberts Spearheads Drive on Substandard Brake Fluids . . . 18

Creeping Killer — CO 20

Metropolitan Life Award Won by B. J. Campbell 22

Public Support:

They Like to *Live* in St. Joseph . . . *by Alice M. Robison* 24

Carol Lane Awards Honor Women's Projects 27

Amusement Device Plugs Driving Skill 28

Motor Transport:

Drivers Take Bow at New York Roadeo . *by Harry L. Becht* 32

Profile of a Safe Driver 34

Be a responsible citizen. Vote November 8

Departments

The Safety Library 6
Today's Traffic 9
Coming Events 19
News From Capitol Hill 23
Boosters 29
Fleet Posters 30
Traffic Record 37
New Safety Equipment 45
Safety Product Literature 46
Advertisers' Index 50

BETWEEN STOPS

"MISTER, can you stop on a dime?

If you asked this question in Brookfield, Ill., you would probably get a quick "No!! from a whopping majority of drivers.

Why?

Because the Brookfield Moose lodge has publicly and dramatically debunked the theory of the fast stop.

Here's how they did it.

The lodge offered $100 to anyone who could stop a car traveling 35 m.p.h. within 50 feet.

In a five hour session one Sunday afternoon, 117 drivers tried — while hundreds of spectators watched. The best performance was turned in by a 17 year old who stopped in 77.3 feet. Most drivers chalked up stopping distances of well over 100 feet.

No amount of safety preaching could put the point across with such impact.

TRAFFIC SAFETY is dedicated to the prevention of traffic accidents through the presentation of objective information and responsible opinion to official agencies, public support groups and the motor transportation industry. The views expressed do not necessarily reflect the beliefs or policies of the National Safety Council, but they are presented in the conviction that the pressing social problem of traffic accidents can best be resolved through freedom of expression and open debate.

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AUGUST TOLL DROPS SLIGHTLY

by H. Gene Miller

MOTOR vehicle deaths in August totalled 3,470, a decrease of 1 per cent from August of the previous year.

For eight months, the total was 24,010, an increase of 1 per cent over the same months of 1959.

August was the first month in the last five to show a decrease, but the small improvement was apparently due to the fact that this year August had only four high-death weekends compared with five last year.

Preliminary reports indicate that the rising trend of motor vehicle travel is slowing somewhat from the earlier pace, but at the end of eight months, it still was 2 per cent ahead of last year. This 2 per cent rise coupled with the smaller 1 per cent increase in deaths for the same months produced a mileage death rate of 5.1 (deaths per 100 million vehicle miles). This was the lowest eight-month mileage death rate on record, and compares with 5.2 for the same months of 1959.

H. Gene Miller is director of the National Safety Council's research and statistics department.

Traffic Summary

August	1960	1959	Change
Deaths	3,470	3,510	—1%
Eight Months			
Deaths	24,010	23,860	+1%
Mileage			
(billions).	470	460	+2%
Death Rate..	5.1	5.2	—2%

Disabling injuries during the first eight months of the year are estimated at about 850,000. These are injuries resulting in disability beyond the day of the accident and do not include minor injuries which undoubtedly total many hundreds of thousands more.

Of the 49 states reporting to the Council, 26 had fewer deaths in August than in August a year ago, one reported no change and 22 had increases.

For eight months, 24 states showed decreases, one reported no change and 24 had increases.

Exceeding the national experience, cities recorded a 6 per cent decrease in August, according to reports from 725 cities of more than 10,000 population. For eight months, these cities showed a 3 per cent increase over last year.

One hundred twenty-eight cities had fewer deaths in August than a year ago, while 116 reported more deaths and 481 showed no change.

For eight months, 245 cities had decreases, 300 had increases and 180 showed no change.

A total of 549 of the 725 reporting cities had perfect records in August. The three largest were Akron, Ohio (308,000); Norfolk, Va. (291,000) and Miami, Fla. (259,000).

At the end of eight months, 187 cities still had perfect records. The three largest were Schenectady, N. Y. (98,000); Topeka, Kan. (82,900) and Lexington, Ky. (66,900).

The leading cities in each population group at the end of seven months,

To Page 37

Leading at the End of August

States

Rhode Island	— 35%	Virginia	— 10%	Omaha, Neb.	— 59%
Nebraska	— 25%	New Mexico	— 10%	Providence, R. I.	— 50%
New Hampshire	— 24%	Illinois	— 8%	Grand Rapids, Mich.	— 50%
Kansas	— 22%	Arizona	— 7%	Worcester, Mass.	— 47%
West Virginia	— 22%	Montana	— 7%	Oakland, Calif.	— 46%
Oregon	— 18%	Kentucky	— 5%	Miami, Fla.	— 45%
North Dakota	— 14%	Texas	— 4%	El Paso, Tex.	— 31%
Iowa	— 13%	Oklahoma	— 4%	Houston, Tex.	— 30%
Nevada	— 13%	South Dakota	— 4%	Atlanta, Ga.	— 30%
Arkansas	— 12%	North Carolina	— 3%	Boston, Mass.	— 24%
New York	— 11%	Idaho	— 2%	Akron, Ohio	— 24%
Wyoming	— 11%	Wisconsin	— *%		

Cities

Birmingham, Ala.	— 19%
New York, N. Y.	— 18%
Seattle, Wash.	— 16%
Chicago, Ill.	— 14%
Wichita, Kan.	— 14%
Honolulu, Hawaii	— 10%
Milwaukee, Wis.	— 9%
San Diego, Calif.	— 9%
San Francisco, Calif.	— 8%
St. Louis, Mo.	— 4%

*Less than .5%

Today's Traffic

Licensing briefs

California's motor vehicle director has ordered a license suspension of at least six months for every person convicted of drunk driving. In Iowa, any driver convicted of a traffic violation that results in a fatal or a serious auto accident may have his license suspended. A Massachusetts driver can lose his license if found seriously at fault in an accident.

Skill isn't everything

The following items prove that it takes more than skill and experience to make a safe driver. Last year Mike Hawthorne, world champion Grand Prix driver, was killed at the wheel of his private car on an English road. This year Nino Farini, a former world champion racing driver crashed his car into a bridge after overtaking a light truck, killing a passenger who was riding with him. Stirling Moss, British champion racing driver, has been under disqualification from driving in Britain for 12 months, after a crash while testing a car.

The last straw

An irate London driver, complaining about the newly instituted parking ticket he received, had this to say, "I accepted American hot dogs. I accepted American iced tea. But this, this I most certainly do not accept."

Inspection in Louisiana

Louisiana has enacted a periodic vehicle inspection law which provides for state-wide inspection of motor vehicles "at least once each year but not more frequently than twice each year." Inspections will be made at stations officially appointed by the director of the state department of public safety. Mississippi enacted a periodic vehicle inspection law earlier this year.

Holiday checks on turnpike

To curb holiday accidents, the Pennsylvania Turnpike Commission conducted safety checks at turnpike interchanges over the Labor Day weekend. Reports show that 367 vehicles were denied admittance to the Turnpike and another 1,342 operators were warned that their vehicles had defects. Tires and lights were the most frequent offenders. Turnpike travelers logged 33,932,074 miles over the weekend. There were 44 accidents—one a fatal.

Something is missing

Patrolman Mel Colman of St. Petersburg, Fla. noticed an elderly driver who was obviously having steering difficulties. After curbing the motorist, Colman asked him to move his foot from the accelerator to the brake pedal to test his reactions. The man grabbed his right trouser leg and pulled his foot over to the brake. He could do no better with his left leg. Further investigation disclosed that the man was unable to walk and had to use a walker frame to hobble from his home to his garage.

SPRINGFIELD SOLVES TOMORROW'S PROBLEMS *TODAY*

by Charles E. Aguar

Springfield and Sangamon county are correcting present traffic tie-ups and preventing future bottlenecks through area planning

Serene Capitol building gives no hint of nearby traffic.

TRAFFIC problems in our cities are not new. It is said that a one-way street system was first started some two thousand years ago when the streets of Pompeii became inadequate for the increased chariot traffic. Pedestrian malls were also popular in those days as was a type of zoning that separated the homes from the stables.

There is no record of a Greater Pompeian Safety Council, but history does provide us with information on the trial and error methods of the city's early traffic planners. We should profit by their example.

Radical solutions, such as one-way streets to carry more traffic faster and pedestrian malls to eliminate traffic entirely, have been used often as a second guess substitute for doing it better in the first place. While hindsight is usually easier, we do have the means today to apply foresight to better traffic flow and control.

Many people are doing a fine job of reducing traffic accidents by educational and legislative means, but their task would be greatly simplified if traffic safety were built into our streets in the first place.

Sound impossible? You can easily prove to yourself that it is not. Just

Charles E. Aguar is a partner in Planning Associates, consulting firm of St. Paul and Hibbing, Minn. While executive director of the Springfield and Sangamon County Planning Commissions in Illinois he was involved in the planning operations discussed in this article.

list the number of miles of new highways, local street and road improvements in your city, county or metropolitan area. Next, list the new subdivisions, shopping centers and industrial sites developed over the past year or so. Now count up the number of access points, traffic bottlenecks, on-street parking hazards, curb cuts, etc. that have been created on these same roadway improvements since you can remember.

Can you truthfully say that these new land and building developments have kept pace with the efforts of the street and highway engineers? Have subdividers made a conscious effort to reduce points of potential conflict, or is every residential subdivision and commercial center another potential death trap?

If your score card is good, your city or metropolitan region has standards of design to cover the subdivisions and development of the land that includes, among other considerations, the feature of "built-in" safety. If you are familiar with urban planning and some of its tools, such as zoning and subdivision standards which put into practice what we preach about accident prevention, then read no farther.

However, if you never considered planners for such practical assignments as reducing traffic damage or saving lives, perhaps it will be worth a few minutes of your time to read on.

Traffic does not occur in a vacuum. The way land is used along our streets and highways determines to a large extent the type and volume of traffic, and the capacity and safety features that can be expected of the route. When developers are permitted to build houses fronting major thoroughfares, streets and highways are used for parking and loading, and structures are permitted with little or no set-back from the right-of-way, accidents find more places to "happen." The whirling gadgets, flashing gimmicks and winking billboards may also have something to do with many mishaps reported as "accidents." Recent Springfield-Sangamon County (Illinois) regional planning efforts are a good example of methods which combine foresight with some hindsight. It should be said at the beginning that the Springfield metropolitan area is not yet a model for others to follow. However, its traffic hazards, parking problems and zoning practices are typical of many other areas, so the comprehensive attempt to build traffic safety into new developments will, perhaps, provide a lesson to others.

Travel in Springfield's downtown area is complicated by influx of tourists attracted to city because of its association with Lincoln.

Like many other cities, Springfield has a by-pass highway that must now be by-passed due to obsolete design and lack of control of adjacent land uses and access points. Interstate 55, now under construction, will adequately handle the needs for a limited access beltline highway for the through traffic around the east portion of the city. Springfield is by-passed by most St. Louis to Chicago through traffic. But its association with Lincoln makes it a tourist attraction (more than a million persons a year visit Lincoln's tomb, for example). Its traffic problems, therefore, are not typical of a 100,000 population community—even one that is also a state capital.

While traffic accidents and deaths are common on the existing by-pass route, the most serious traffic circulation problem is local and visitor traffic in the central area. Thoroughfares have been made of streets that were recently within quiet and pleasant residential neighborhoods. As traffic has increased homes have given way to commercial properties that only add to the congestion and danger and create parking problems. Six railroads in scattered locations bisect the central area and hinder internal circulation while adding to the problems of traffic delay and hazard.

With this background in mind, we can turn to a discussion of what is planned to protect the huge investment in limited access construction and to handle the large increase in traffic that will be dumped into local streets.

The alternate to continued loss of lives, efficiency and property values is to coordinate street and highway planning with the total process of city and regional planning. This is being done in Springfield-Sangamon County by the following steps:

1. Basic Objectives and Goals
2. Survey and Analysis
3. Plans and Legislation
4. Implementation.

By establishing basic objectives and goals the planners are only asking themselves what they expect to do before they do it. The basic planning objective is the attainment of the best possible social, economic and physical environment for the citizens. The basic circulation objective is to provide safe, efficient and economical movement of people and goods between, within and through rural and urban areas.

These broad objectives and a list of more detailed goals were adopted by the city and regional planning commissions as the first step toward planning according to a sound but feasible and workable guide.

Surveys and analysis are means to get the facts and learn from them what has happened in the past. Trends and projections can be helpful in making forecasts of future needs provided they are not too limited. The economic potentials and population prospects for Sangamon County were ana-

lyzed before applying data on traffic. Regional circulation patterns within the state and Sangamon Valley region were studied.

The Illinois Division of Highways cooperated by giving a priority assignment to the county in up-dating traffic volume counts. Every route in the county that carried at least 100 vehicles per day was projected in volume 20 years in order to determine future right-of-way needs. In all, traffic volumes are expected to more than double by 1980.

Traffic delays caused by railroads crossing at 30 grade intersections were counted over 12 hour periods. The cost of delays at these principal intersections was estimated at $5,000 per day or *approximately two million dollars per year.* This does not include an estimate of the cost of accidents. Each grade crossing (there are 135 in the urban area and more than 400 in the county) is a potential location for loss of life, limb and property. In the last 10 years there have been 143 accidents, 89 injuries and 23 fatalities involving railroads within the built-up city area.

The principal traffic generators in Sangamon County are most naturally located within the concentrated urban area. The Springfield central business district and the state capitol complex accommodates more than 25,000 workers within an eight square block area. Other generators of traffic such as industries and schools were studied in relation to the existing circulation system, volumes of traffic and accident patterns.

Space does not permit a detailed account of the functional plans, legislative tools and project planning that make up a comprehensive city and regional planning program. We will only discuss those elements that are most closely associated with traffic safety features.

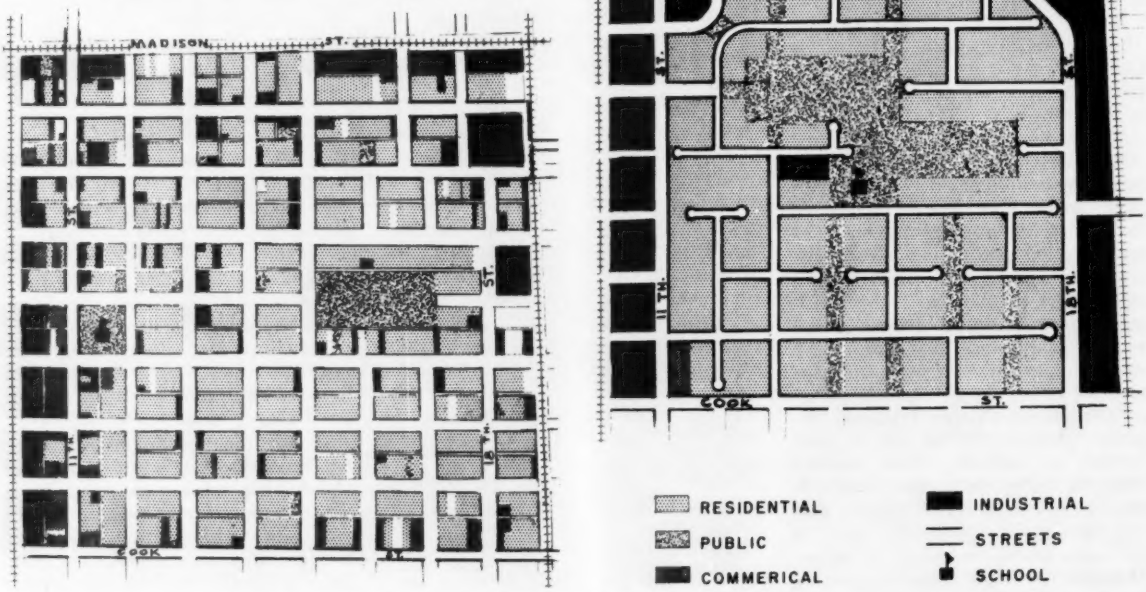
Circulation Plan. This plan, resulting from the studies described above was developed in conjunction with the land use plan for the region. A number of the highway and rail transportation recommendations are already being put into action and others are being given further engineering study. The plan proposes rail consolidations to free the central city area from present congestion and danger. A controlled access highway or expressway is proposed through the city following the right-of-way of a relocated railroad. Experience in many cities has proved expressways to be five times safer while carrying four times as many vehicles per lane per hour. Other proposals include re-routing of major streets so as to avoid residential neighborhoods and the concentration of heavy traffic on a minimum number of high caliber routes designed to carry anticipated volumes.

Subdivision Standards. In 1957 an ordinance establishing high standards of design and improvements for land subdivisions was adopted for Springfield and the unincorporated area within 1½ miles. Each new subdivision is now related to the comprehensive city and regional plans. As land is subdivided into blocks and lots, developers dedicate right-of-way of

To Page 48

CHANGE OF FACE

Drawing at left shows a Springfield neighborhood as it appears today, drawing at right shows same area as it will be laid out under new plan.



First Trustees Award To New Jersey and Kalamazoo

KALAMAZOO, Mich., and New Jersey have been named by the National Safety Council as the city and state which did the most in 1959 to protect their citizens from accidents of all kinds.

They thus became the first winners of a new Council award which differs from any other by recognizing work done in all fields of accident prevention covered by the Council — traffic, work, home, farm, school, recreation and transportation. Other council awards relate to only one phase of safety.

The new award—called the Trustees Award in compliment to the Council's trustees—is based not only on actual accident records, but on accident prevention activities by media, churches, civic and youth groups, public officials and safety organizations.

Each city and state which earns the award will receive a crystal sculpture fashioned to symbolize the flame of life—which accident prevention seeks to sustain.

In conferring the awards, the Council proclaimed Kalamazoo and New Jersey as Green Cross city and state of the nation.

Formal presentation of the 1959 awards was made at the banquet of the 48th National Safety Congress, in the Conrad Hilton hotel in Chicago Tuesday, Oct. 18, before 2,000 guests.

"Selection of Kalamazoo and New Jersey was made after the most exacting and comprehensive study by our staff and the judges of the award," said Howard Pyle, Council president.

"Representing as it did the first time any award has been established on the basis of the programs and records of a city or state in every area of safety, the award could be determined only after months of exhaustive review of the accident records and the accident prevention activities of hundreds of cities and every state.

"Every city of more than 50,000 population which reports its accident records to the Council was considered for the award. And all states except Alaska and Hawaii were considered. Information on Alaska and Hawaii for 1959 was incomplete.

"It should be emphasized that while the total score attributed to Kalamazoo and to New Jersey was higher than that of any other city or state, Kalamazoo and New Jersey did not necessarily excel in each separate category of accident prevention.

"But the honor that has come to the recipients of the award could not have been achieved, we are sure, without a sustained, intelligent and effective effort by public officials, safety organizations and many other groups and individuals.

"Safety does not happen. It is earned. The National Safety Council therefore salutes and commends Kalamazoo and New Jersey for bringing to their citizens the assurance that they have chosen as their home a place where safety is not a word but a way of life."

Judges of the award were members of the Awards Committee of the Council's board of directors. They were H. G. Mangelsdorf, Standard Oil Co. (N. J.); Robert R. Burton, senior vice president, Kenyon & Eckhardt, Inc.; Dr. A. L. Chapman, assistant surgeon general, U. S. Public Health Service; Robert T. Ross, manager, employe services department, Ford Motor Co., and A. E. Spottke, vice president, Allstate Insurance.

FLAME OF LIFE — UNIQUE SCULPTURE

The Flame of Life was specially designed and made by Steuben Glass for the National Safety Council. It is planned that two examples will be made each year to be used by the Council as the annual Trustees Awards. The piece is a tall, abstract crystal sculpture in the form of a flame which curls in an upward sweep from a narrow base to a pointed top. It is made entirely by hand by a skilled glassmaker and then polished like a jewel. The crystal sculpture will be reserved for the exclusive use of the National Safety Council and will not be duplicated by Steuben. It was designed by Donald Pollard. Among Pollard's many other works is an engraved crystal globe in the collection of President Eisenhower.

A special Christmas campaign poster won the approval of (left to right) Harold J. Holmes, director of church safety activities, NSC; Rabbi H. B. Franklin, Temple Israel, Long Beach, Calif.; Rev. James E. Hansen, assistant pastor St. Anthony's Catholic Church, L.B.; and Cdr. Edwin W. Andrews, CHC, USN, Chaplain, United States Naval Base, Los Angeles, Long Beach.

"Keep Christmas In Your Driving"

HOLIDAY CAMPAIGN READY TO GO

IS A staggering traffic toll a necessary accompaniment to the Christmas celebration?

This question brings a vehement "No" from the National Safety Council's National Committee of Religious Leaders for Safety, which is mobilizing the moral forces of the nation in a campaign to reduce the annual holiday slaughter. Theme of the program is "Keep Christmas in Your Driving." It is being packaged in kit form, with a step-by-step campaign plan.

Governors, public officials, traffic police and civic groups will promote it in their respective areas. The National Committee of Religious Leaders for Safety will spearhead the campaign in the religious press and among key church leaders on the national, state and local level. In addition, individuals and all safety and civic groups will be urged to give it strong support.

Target of the Christmas campaign is the driver — the crucial factor in most traffic accidents.

There is a growing awareness that much of the energy expended in traffic engineering and other phases of traffic safety work is being wasted because drivers refuse to accept their fair share of responsibility for safety on the road. How to change this attitude is the big question. Traffic safety professionals are devoting much study to the problem—which was the subject of the entire traffic program at this year's National Safety Congress.

During the Christmas campaign, which will begin December 1 and continue through New Year's day, religious leaders, government officials and public support groups will make a united effort to bring home to the driver his moral responsibility for his own safety and the safety of all he meets in traffic.

Arthur B. Langlie, former governor of Washington and now president of the McCall Corp., who is chairman of the National Committee of Religious Leaders for Safety will make the following appeal:

"In a world beset by conflict of ideas and emotions, when every thinking human being has cause for concern, there is no better place to answer the question, 'What can I do about it?' than in our own hearts and conduct.

"The practical aspects of thinking, acting and talking safety on our highways and in our homes through concern for others, helps build quality and character in people and this can vastly improve our world.

"Our religious beliefs and faith hold the answer to the most serious problems confronting us, but belief and faith without action are very sterile. A simple and immediate way to translate these concepts into active love is to first appreciate the hazards that confront others through our carelessness, and then to act by controlling our own judgement and emotions so as to preserve the safety of others as well as our own.

"Let's keep the spirit of Christmas in our hearts by acting in keeping with that spirit of love."

This is the second year that the Council's National Committee of Religious Leaders has sponsored a drive to make the Christmas spirit of brotherly love prevail on the highways. The current campaign is patterned after the successful 1959 program.

Its aim is to call attention to the incongruity of irresponsible behavior in the celebration of a deeply religious holiday and to point out specific dangers encountered during the holiday.

Among these are increased travel, increased drinking, and the hurrying complex resulting from stepped-up shopping and party-ing.

Much attention is being given to drinking and driving—the lethal combination which shows up as a contributing cause to many holiday accidents.

Again, as it was last year, the National Safety Council's annual "dry-up-the-office-party" effort will be incorporated into the Christmas campaign. In addition, it will be promoted through the Council's 8,000 business and industrial members. These companies will be asked to take a critical look at their office parties and either keep the cork in the bottle or eliminate the parties.

The reason for this is that the Council's surveys show that a sizable percentage of Christmas traffic accidents occur in the early hours of the holiday period. Many of these can be traced back to the drinking indulged in at the office party.

Safety warnings and facts on the proper use of toys and Christmas trees and decorations will also be a feature of the holiday accident prevention campaign.

Kit Available

Kits containing campaign materials have been mailed to officials and religious and lay leaders and media. Others wishing to promote the campaign may obtain kits by writing to: Christmas Holiday Safety Campaign, National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.

Last year's program received enthusiastic support from church and lay leaders, and the press, radio and TV gave generous coverage. It is expected that this year's program will build on last year's solid foundation, and that more widespread participation and greater impact will result.

In discussing the campaign, Harold Holmes, director of NSC's Religious Activities Department, said:

"The clergy of all faiths are showing a growing concern over the traffic toll and are becoming more active in traffic safety programs.

"The response to last year's campaign showed that they are eager to join in organized efforts to bring the traffic safety message to their congregations. We are counting on the continued support of those who made last year's campaign a success. We are also looking for much more widespread participation.

"During 1960 many church groups have established church safety committees. The Christmas campaign—with its religious emphasis and its step-by-step planned program—offers an excellent means of getting these committees started in active traffic safety work.

"We urge all governors, mayors, officials and safety organizations to take this opportunity of bringing the church groups in their areas into the organized traffic safety movement."

Material To Do the Job

The leaflet shown below is only one of the leaflets, reprints, news releases and posters included in the National Safety Council's Christmas holiday campaign kit.

HOW VIRGINIA RUNS SUCCESSFUL INSPECTION PROGRAM

by R. B. King

MANY YEARS ago, some of the best thinking people in the traffic safety field concluded that defective highways, defective vehicles and the human element involved were the three basic factors in motor vehicle crashes. At about the same time, traffic safety experts advocated that a state should not activate a periodic motor vehicle inspection program until all other phases of the state's traffic safety program had reached an acceptable level.

There appears to be no consistency in these two thoughts and the latter prevailed. In fact, in the 1946 Action Program of the President's Highway Safety Conference, there appeared a statement concerning motor vehicle inspection that is almost verbatim to that above. Later reports encouraged inspection and the Officials' Conference of the President's Committee for Traffic Safety recognized the need for inspection in its report of December 1957, but the seeds of the previous philosophy have been so widely and deeply sown that it has been difficult to interest many officials and legislatures in this program. Perhaps this is true because the experts attempted to say to the states that were considered to need inspection programs that only the state operated system of inspection stations should be established.

The purpose of this article is to reveal the fallacy of the original philosophy, the error of attempting at the national level to decide the best type of program for all states, and to point out the real place in traffic safety for motor vehicle inspection.

When we accept the theory of only defective highways, defective vehicles, and human errors being the causative factors of crashes, we are establishing three avenues of approach to combating the traffic safety problem. One will readily admit that the highway engineer builds as much traffic safety into a new road as is consistent with available knowledge and financing. Once the highway is constructed, no one would suggest that we eliminate our highway maintenance program and cease removing road hazards as they arise.

Capt. R. B. King is safety officer, Virginia State Police, safety coordinator for the State of Virginia and chairman of the Inspection Committee of the AAMVA.

When we consider the human element, we recognize that traffic safety legislation is a subject of continued study and improvement. This is also true of the issuance of operators' licenses and of driver improvement and control through re-examination, hearings and similar projects. Much effort is expended in improving the driver through formal education as well as through public education. Police action is studied continually and is improved. This is also true of court procedures.

It is obvious that in highway construction and maintenance, legislation, operator's examination and control, education, police action and court action we do not accept the original product and leave improvement to the whims of the motorist. We must also agree that the automotive engineer has produced a safe vehicle commensurate with existing knowledge and the cost of the vehicle. But these vehicles, like those phases of traffic safety mentioned above, must be subject to proper maintenance and continued study to maintain an adequate and safe condition. Experience has proved that the average motorist will not establish a preventive maintenance program for his vehicle without the legal requirement that he do so.

Experience has also shown that the following benefits accrue in states which have adopted an effective inspection program:

- The number of defective vehicles on the road is reduced.
- The number of improperly registered vehicles is reduced.
- The enforcement workload of police and courts is reduced.
- Such states do not become dumping grounds for mechanically unfit vehicles, as states without effective inspection programs frequently do.

Those who advocate the original philosophy of holding inspection in abeyance are acting like a doctor who —having a patient with heart trouble, cancer, and tuberculosis — decides to treat for the heart condition and cancer while the patient dies of tuberculosis. So is it true with traffic safety. People are being killed each day from defective highways, defective vehicles, and human errors. To fail to use any of these avenues of approach to combat the problem is a grave mistake.

It seems humanly impossible to establish and recommend a single inspection system that is most satisfactory for all states. The variable conditions that exist from predominantly rural areas to predominantly urban areas clearly prevent this. A state with large rural areas attempted to operate a limited number of state operated stations, but the inconvenience of the system was so great that the inspection law was quickly repealed. Another state with much rural territory studied the establishing of a state owned and operated system and found that it would cost over $1,800,000 to activate 34 inspection stations. So the program was abandoned.

An alternative to the state *operated* inspection system is the state *appointed* system. In the latter, the state selects service stations, garages, etc., to make the actual inspections—under state supervision. The state *appointed* system requires careful selection of stations with constant and strict supervision in order to assure the citizen a proper and adequate inspection at the least possible cost and delay. In Virginia we require the supervising trooper to visit each inspection station frequently and submit a written report on each station semi-monthly. These reports cover the facilities and oral examination of the mechanic conducting the inspections. Any minor irregularities are discussed with the station management. Major irregularities result in the suspension of the mechanic involved, the suspension of the station and, when warranted, the prosecution for improper inspections.

Thus it becomes obvious that, while the periodic inspection of motor vehicles is needed, the procedure in handling the problem varies from state to state and that each state must study

To Page 43

To be approved, seat belts must meet standards for quality and attachment.

Mechanic shows police defective brake drums which have been removed from automobile which has been brought in for required inspection.

Roberts Spearheads Drive on Substandard Brake Fluids

DURING the closing days of the 86th Congress, Rep. Kenneth A. Roberts, chairman of the House Subcommittee on Health and Safety, introduced a bill "to establish federal safety standards for motor vehicle brake fluids to eliminate a very serious highway safety hazard."

Although the bill, H.R. 13038, did not reach the floor of the House due to the rush of last minute must legislation, the measure helped to highlight at the national level the importance of removing substandard brake fluids from the nation's highways. It is expected that the bill will be introduced again at the next session.

In his remarks before the House underlining the need for Congressional action, Roberts said that "every vehicle with brakes depending on substandard fluid is a menace to life and limb." The Roberts' bill had provided that the sale of brake fluids not measuring up to specifications established by the Secretary of Commerce be prohibited.

Considerable work has been done in recent years to expose the dangers of substandard fluids. In the forefront of this effort has been the Society of Automotive Engineers. Writing in a recent issue of *Brake and Front End Service*, F. J. Markey, chairman of S.A.E.'s Brake Fluid Committee, pinpoints the problem. "The threat of danger," says Markey, "lies in high temperatures generated in brakes while stopping the car. Responsible for this heat is increased horsepower coupled with automatic transmissions along with smaller wheels and smaller brakes."

Intense heat is built up in the wheels of vehicles under repeated use of the brakes. This heat vaporizes substandard brake fluids because of their dangerously low boiling points, which are below S.A.E. minimum standards, thus causing temporary and hazardous loss of braking power.

The phrase "phantom" or "vanishing" killer is used in connection with substandard brands because, by the time the car is investigated as to the cause of an accident, the brakes have cooled and the vapor has returned to its fluid state and the brakes will work again.

In a recent test of the brands of brake fluid being marketed in the Detroit area, Chrysler Corp. engineers found that 28 per cent were substandard and that these substandard fluids are "even worse than they were five years ago."

In 1956, a recommendation was made to the annual meeting of the Chemical Specialties Manufacturer's Association to prohibit the sale of unsafe brake fluids. And in the past few years, 27 states and the District of Columbia have passed legislation to prevent the sale of inferior fluids. However, in spite of the well-publicized danger, many states have not taken legislative steps to eliminate this important cause of brake failure.

Convinced that a federal statute is the key to solving the problem, Rep. Roberts authored bill H. R. 13038. If passed, the provisions of this bill should effectively eliminate substandard fluids from sale and use throughout the nation.

States Which Regulate Brake Fluid

1. Alaska
2. Alabama
3. Arkansas
4. California
5. Connecticut
6. Delaware
7. D. of C.
8. Florida
9. Georgia
10. Louisiana
11. Maine
12. Minnesota
13. Mississippi
14. New Jersey
15. New York
16. North Carolina
17. Oklahoma
18. Pennsylvania
19. South Carolina
20. Tennessee
21. Texas
22. Virginia
23. Wisconsin
24. Rhode Island
25. Massachusetts
26. Kentucky
27. Arizona
28. Michigan

(as of May, 1960)

TRAFFIC SHORT COURSES

January, February, and March, 1961

Jan. 9-20 — Chemical Tests for Intoxication Supervisors' Conference —Center for Police Training, Indiana University, Bloomington, Ind.

Jan. 9-20 — Western Region Police Traffic Training Program: Supervision of Police Personnel and Activity—University of California, San Francisco.

Jan. 18-20—Traffic Operations Seminar for Government Officials — Northwestern University Traffic Institute, Evanston, Ill.

Jan. 23-27—Western Region Traffic Court Conference — University of California, Berkeley.

Jan. 23-27—Motor Fleet Supervisor —University of Alabama, University, Ala. Contact: W. F. Rickard

Feb. 9-10—Southwestern Region In-Service Training Conference for Graduates of TPA Training Program and Their Chiefs—Arizona State Patrol, Phoenix.

Feb. 13-March 3—Fundamentals of Police Traffic Service—Northwestern University Traffic Institute, Evanston, Ill.

Feb. 17-21—Trainers of Commercial Drivers—Purdue University, Lafayette, Ind. Contact: D. A. Weaver

March—Motor Fleet Supervisor— University of Oklahoma, Norman. Contact: William Hartman

March 6-7—Motor Fleet Supervisor —University of California, Los Angeles. Contact: Bob Glenn

March 6-24—Traffic Engineering Seminar — Northwestern University Traffic Institute, Evanston, Ill.

March 8-10 — Motor Fleet Maintenance — University of California, Los Angeles. Contact: Bob Glenn

March 8-10 — Southeastern Region In-Service Training Conference for Graduates of TPA Training Program and Their Chiefs — Atlanta Police Department, Atlanta, Ga.

March 13-15—Motor Fleet Maintenance — University of California, Richmond. Contact: Bob Glenn

March 13-31—Accident Investigation —Administration and Techniques —Northwestern University Traffic Institute, Evanston, Ill.

March 15-24 — Chemical Tests for Intoxication—Northwestern University Traffic Institute, Evanston, Ill.

March 13-15—Motor Fleet Maintenance — University of California, Richmond. Contact: Bob Glenn

March 16-17 — Motor Fleet Supervisor—University of California, Richmond. Contact: Bob Glenn

March 20-22—Motor Fleet Maintenance—University of Washington, Seattle. Contact: Fred H. Rhodes

March 20-24—Motor Fleet Maintenance—Ontario Safety League, Toronto, Canada. Contact: Frank C. DeVenne

COMING EVENTS

Nov. 9, Fort Worth, Tex.

16th Annual Industrial Institute. Hotel Texas, from 9:30 a.m. to 4:30 p.m. Contact Larry Graff, safety director, Fort Worth Safety Council, Majestic Bldg., Fort Worth 2, Tex.

Feb. 2-3, Madison, Wis.

Wisconsin Council of Safety, Inc. 19th Annual Mid-Winter Safety Conference and Exposition. Hotel Schroeder, Milwaukee. Contact R. W. Gillette, Wisconsin Council of Safety, 454 Washington Bldg., Madison 3, Wis.

March 5-7, Atlanta, Ga.

Southern Safety Conference and Exposition. Atlanta Biltmore Hotel. Contact W. L. Groth, executive director, Southern Safety Conference, Inc., P. O. Box 8927, Richmond 25, Va.

April 3-4, Boston, Mass.

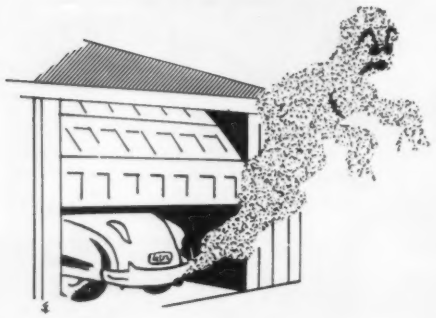
40th Annual Massachusetts Safety Conference and Exhibit. Hotel Statler Hilton, Boston. Sponsored by Massachusetts Safety Council, Safety Council of Western Massachusetts and Worcester County Safety Council. Contact Bert Harmon, manager, Massachusetts Safety Council, 54 Dovenshire St., Boston 2, Mass.

1. Stop beside car ahead of empty space but be sure it has been properly parked. Cars should be parallel and at a distance of about two feet apart.

2. With cars aligned, back up slowly, steering right until backrest is about two feet ahead of tip of other car's left rear fender. At this point, steering wheel should be full right.

3. Continue backing slowly with wheels turned full right. Stop when backrest lines up with fender tip. Resume backing, steering left to straighten wheels.

4. When windshield's lower right corner lines up with tip of fender, continue steering left to straighten car. Steer full left to clear car ahead. Now, align your car with the curbing.



CREEPING KILLER - CO

Talk of poor ventilation brings to mind thoughts of a stuffy closet or a spare room or attic that has been sealed up tightly for a long period of time. We think of the stale air and of how difficult it is to breathe. When we hear about someone being poisoned, a lot of us think of snake bite, insecticides, or spoiled food.

There's a poison, however, that is far more common, more dangerous than the ones we think of, and its effectiveness is closely concerned with ventilation. It's carbon monoxide, and if you own a car, it travels with you wherever you drive. CO is a gas you cannot see, taste, or smell. It won't tickle your throat or make your eyes smart, or in any other way make its presence known.

CO is produced by the incomplete burning of a solid, liquid, or gaseous fuel. When a person is exposed to the gas in a place which does not have enough ventilation, poisoning occurs, sometimes very quickly.

Why CO Is Dangerous

Carbon monoxide is dangerous because it sickens and kills by cutting off the oxygen supply from the body's tissues. Ordinarily the oxygen you breathe is carried from your lungs by the red cells of your blood to all parts of your body. This combination with the red cells is very important, for just breathing oxygen into one's lungs is not enough to maintain life. The oxygen must combine with the blood's red cells and circulate through the blood stream and be carried to all parts of the body. If it does not, your life will be threatened.

CO can combine with red cells 200 times easier than oxygen. When oxygen and sizable amounts of CO are breathed in together, the CO displaces the oxygen. Then you become ill and if oxygen is completely cut off, you may even die.

Carbon monoxide, the silent killer, causes more deaths than any other poison. It can kill within minutes depending upon the concentration in the air. If a victim remains unconscious in the CO poisoned air for some time, the after-effects may be lasting, resulting in permanent brain damage. Even a mild dose of CO poisoning may dull the reflexes of a mechanic, making it risky for him to work with machines or even simple handtools.

Ventilation

Also dangerous are excessive warmth and lack of proper ventilation in an automobile. It has long been suspected that poor or no ventilation is a factor in many auto accidents. There are several ways in which inadequate ventilation can contribute to an accident: carbon monoxide may seep into the car; warmth from the heater and body heat can steam up windows and obscure the driver's vision; in poorly ventilated autos excessive tobacco smoke can deposit a film on windows and thus cut down visibility; and drowsiness, the driver's old nemesis, is usually found in very warm cars and where driving is done at night on monotonous stretches of road.

Symptoms

The symptoms of carbon monoxide poisoning are: tightness across the forehead, followed or accompanied by throbbing in the temples, headache, weariness, weakness, dizziness, nausea, loss of muscular control and increased pulse and respiration. If the concentration of carbon monoxide in the air is great enough, the victim may fall unconscious without any warning signals.

If you're driving at night and the darkness seems blacker than usual, the glare of oncoming lights brighter than usual, carbon monoxide might well be the cause.

Air Circulation vs Carbon Monoxide

The above situations can be handled very easily by keeping at least one window in the car open. Fresh air is just the remedy a person needs to drive away that drowsy feeling. In bad weather this can be obtained by opening the fresh-air vents on the front of most cars. On the highway, especially during inclement weather, it's a good idea to have the air-intake vents at the front of the car open.

Recent tests have shown that, under certain conditions, the concentration of carbon monoxide within the car is often greater with the windows open than with them closed because the draft created by an open window can aid CO or exhaust fumes in seeping up through the floorboards and into the car if there are leaks in the exhaust system. The answer to this is to offset the vacuum effect of open side windows with positive air pressure of a front vent or air duct.

Furthermore, if the car's exhaust system is in good repair, there is little, if any, danger of being overcome while driving. The safest way to combat this hazard is to have your car's exhaust system checked regularly when your car is taken in for lubrication jobs.

An additional hazard exists with station wagons or

carry-alls when the rear window or door must be kept open when carrying long objects. In situations of this kind, the fumes are drawn in from the tail pipe when vehicle is standing. To combat this, a front window or a vent should be opened.

A window should always be kept open when your vehicle is parked with the engine running. Wherever you drive your car, carbon monoxide goes with you. Guard against it.

Don't Follow Other Cars Too Closely

Slow-moving city traffic can lead to trouble. When traveling in heavy traffic, or when following buses or vehicles "burning oil," high concentrations of exhaust fumes can be drawn into your car through open ventilating ducts. You have probably noticed that exhaust fumes from cars ahead of you gain easy access to the inside of your car because exhaust pipes are located at nearly the same height as air intake vents. When nose-irritating fumes enter your car, close the vents and open a window. This is the proper thing to do, in city traffic, or when passing through a tunnel.

Indirect Cause of Accidents

In addition to being dangerous to one's health, CO can also indirectly cause an accident. It may affect a driver so that he loses control of his moving vehicle. This is evident from the first symptoms of the poisoning. Enforcement officials suspect that many one car accidents, rear-end collisions and accidents in which the driver says he fell asleep are caused by carbon monoxide.

The number of people who are victims of this poisonous, creeping killer, includes motorists who warm up their engines with the garage doors closed, auto mechanics who repair cars in closed garages, and people who sit in parked cars and leave the motor running to keep the heater or air conditioner operating. (This hazard is more prevalent during the wintertime.) Running the motor of a car in a closed garage for five minutes may mean death.

Fresh air is the one way to prevent carbon monoxide poisoning.

How To Prevent a CO Accident

- **Check automobile exhaust systems regularly, especially for blown out gaskets, loose manifolds, leaking exhaust pipe connections, holes in mufflers.**
- **Be sure the doors are open in the garage or space where an automobile motor is running. Do not allow the engine to run more than a few minutes, even when the garage door is open.**
- **Shut the engine off when sitting in a parked car for more than a few minutes.**
- **Never drive with all the windows closed.**
- **In slow-moving, closely spaced traffic, or while traveling through tunnels, keep air-intakes of car closed to be sure that CO from exhaust pipes of cars in front of you will not collect in large amounts in your own car.**
- **If you're sleepy on the road, the cause can be carbon monoxide. Stop at once, get out of the car and breathe fresh air. Then drive with the windows open.**

First Aid for CO Poisoning

Knowing what to do and acting quickly can save a life. This is especially true in acute cases of CO poisoning where time is of the utmost importance. These are the steps to take:

1. Remove the victim to fresh air immediately. If he is not breathing, or is breathing irregularly, begin artificial respiration AT ONCE!

2. Call, or have someone else CALL A DOCTOR immediately. Also send for an ambulance service or rescue squad, fire or police department for special equipment to help revive the victim. However, do not wait for this help to arrive; start your first aid without delay.

3. Continue artificial respiration when the emergency equipment arrives, providing both kinds of treatment at the same time until natural breathing returns, unless otherwise directed by a physician. Continue artificial respiration for two hours or more, if natural breathing is not restored.

4. Keep the victim warm with blankets or other covering.

5. Continue application of oxygen as provided through the emergency equipment, for 15 to 30 minutes after natural breathing returns. This will assist in quickly ridding the blood of carbon monoxide.

6. After the victim begins to breath again, keep him warm and quiet to stave off any danger of shock.

7. Avoid use of stimulants such as coffee or tea, since these may strain the heart.

8. Aid victim's circulation by rubbing the arms and legs.

9. Urge the patient to rest and recover slowly to avoid any strain on the heart.

Reprints of this Fact Sheet are available.

Metropolitan Life Award Won by B. J. Campbell

B. J. CAMPBELL, administrator of research with Cornell University's Automotive Crash Injury Research program, has been named winner of the National Safety Council's first Metropolitan Life award for research in accident prevention.

Campbell received the award for his work on an extensive study of driver improvement under the point system—made while he was with the Institute of Government at North Carolina. The project was part of a larger study entitled "Driver Improvement — The Point System," which was financed by a grant from Esso Safety Foundation and sponsored by the American Association of Motor Vehicle Administrators.

The Metropolitan Life award is administered by NSC under a grant from Metropolitan Life Insurance Co. It is designed to recognize researchers studying the causes of accidents and to encourage more research workers to include the problems of accident causation in their studies. The winner receives $1,000 and a plaque.

Campbell's project was judged to be "the most significant contribution toward the reduction of accidental injuries and deaths" of 65 projects submitted for consideration. All forms of safety were represented by the projects.

Campbell completed his Ph.D. in experimental psychology at the University of North Carolina, where he was an assistant director of the Institute of Government.

In his study he asked such questions as these:

"Is there a direct link between the number of nonaccident traffic violations of drivers—young and old alike—and the number of traffic accidents they have?"

"Does the driver-licensing point system actually reduce the number of traffic accidents?"

He came up with "yes" answers to both questions.

Every state with the point system was considered in the study, as well as the traffic records of 40,000 drivers.

Campbell received the award during the week of Oct. 10-14 in Chicago at the annual meeting of the American Life Convention, an association of life insurance companies.

It was presented by Frederic W. Ecker, chairman of the board of Metropolitan Life Insurance Co.

Judges of the award were the committee on research and education of the National Safety Council's board of directors. Dr. William P. Yant, director of research, Mine Safety Appliances Co., Pittsburgh, is chairman of the board of judges.

"More and better research, of the type represented by projects submitted for this award, is one of the most vital needs of safety today," said Dr. Yant.

"We commend Mr. Campbell for his outstanding efforts."

NSC Announces Railroad Award

Eighteen U. S. and Canadian railroads have been honored by the National Safety Council for outstanding public safety programs for their employes and the general public.

The Council's Public Safety Activities Award, designed to recognize and stimulate community safety work by railroads in areas they serve, went to: Atchison, Topeka and Santa Fe Railway System; Atlantic Coast Line Railroad Co.; Canadian National Railways; Canadian Pacific Railway Co.; Chesapeake and Ohio Railway Co.; Chicago, Burlington & Quincy Railroad Co.; Clinchfield Railroad Co.; Delaware & Hudson Railroad Corp.; Duluth, Missabe and Iron Range Railway Co.; Illinois Central Railroad; Missouri Pacific Railroad Co.; New York Central System; Pennsylvania Railroad Co.; St. Louis-San Francisco Railway Co.; Southern Pacific Co.; Terminal Railroad Association of St. Louis; Texas and Pacific Railway Co., and Union Pacific Railroad Co.

Among activities recognized by the award are off-the-job safety programs for employes, cooperation with local safety councils and civic groups, participation by railroad personnel in community safety activities, and attention to public safety in institutional advertising and public information work.

The picture shows the judges (seated L to R), W. O. Wilson, manager of safety, Standard Oil Co., (Ind.); L. J. McEnnis, Jr., director of traffic safety public relations, Insurance Institute for Traffic Safety, and J. C. Schmitt, utilities engineer, Illinois Commerce Commission, discussing entries with NSC staff members (standing L to R) Jack Trimble, supervisor, Signs of Life program, Daniel Reynolds, director, traffic operations, and Harry Porter, director, traffic department.

NEWS FROM CAPITOL HILL

Traffic Safety

Congress passed H.J. Res. 402 and sent it to the President for signature. This bill would grant approval to an interstate compact between Maryland, Virginia, and the District of Columbia for the regulation of mass transportation in the metropolitan area of Washington, D. C.

The agency to be created under the compact would regulate fares and routes and would coordinate auto and bus travel.

In a review of the Congress's recent action concerning air pollution, Congressman Kenneth Roberts (Ala.) expressed regret that S. 3108, or its counterpart in the House, H.R. 10696, failed to gain Congressional approval. These bills would have extended the Federal Air Pollution Control Act.

Roberts said he plans public hearings and field studies on this legislation prior to Congress's reconvening, to be able to move for early action in the next session. He also expressed disappointment with the automobile industry's limitation of the installation of blow-by devices for 1961 to cars sold in California. He said: "I think the record establishes beyond a doubt that we need this simple, inexpensive device. Apparently, the only way we are going to convince the industry that we want it is by passing legislation, whether at the federal or local level, or both."

Toward the end of the session, Roberts introduced H.R. 13038 to establish federal safety standards for motor vehicle brake fluids, "to eliminate a very serious highway hazard." He stated that efforts by states to meet the dangers of substandard fluids were unavailing and that "the only way these hazardous fluids can be kept off the market is by federal legislation."

The Secretary of Commerce designated the Bureau of Public Roads, under the direction of the Federal Highway Administrator, to establish and maintain the driver register authorized by the Congress in P.L. 86-660.

The register will serve as a clearing house to identify drivers whose licenses have been revoked because of driving while intoxicated or who have been convicted of a traffic violation resulting in loss of life.

The Secretary emphasized "that the federal government is not entering either the driver licensing or traffic-law-enforcement fields," and that the register will be operated as "a voluntary state-federal enterprise."

Preliminary forecasts indicate the register may not be in full operation until the latter part of 1961. The Bureau anticipates "that the register will provide impersonal statistics of considerable value to all those working in highway safety."

An interesting proposal for meeting the nation's highway traffic jams was made by the deputy federal aviation administrator, who suggested that aircraft capable of vertical and short take-off and landing offered a flexible solution to the commutation problem.

Motor Transport

Congress approved and sent to the President, S. 1806, an Administration proposal to revise the Transportation of Explosives Act.

The bill brings under ICC jurisdiction the transportation of radioactive materials and of etiological agents and extends to private and contract carriers the penalties now applicable under law to common carriers.

To Page 28

Monument to Alberta Safety Man

A unique monument was unveiled in Canada last July, honoring the memory of the founder and former director of the Alberta Safety Council, Howard Stutchbury. The memorial is a 16 ft. triangular pylon.

At a sunny afternoon ceremony, attended by government, civic and safety officials, Stutchbury's daughter, Audrey, drew aside a Union Jack revealing the memorial's placque inscribed: "Howard Stutchbury, 1874-1957. Devoted servant of the community at large. Remembered for his contribution to the church, the arts, veteran's affairs, industrial development and as a pioneer of the public accident prevention movement in Alberta. He gave unsparingly of himself to insure that safety education would be available to all. Founder of the Alberta Safety Council, 1946."

THEY LIKE TO *LIVE* IN ST. JOSEPH

by Alice M. Robison

DRIVE 100 miles north and east of Chicago via U.S. 12 and you will reach the city of St. Joseph, Mich.—gateway to the bustling midwest fruit belt and to a summer resort area which annually calls thousands of visitors to the lakes and playgrounds of that state.

As you enter the city from the south (or the north) on route 12 you are not met by the usual small sign setting forth the city's name and current population. Instead, a large and colorful signboard commands your attention.

"We like to LIVE in St. Joseph," it proclaims. "Please drive carefully. Obey our traffic laws. The life you save may be your own."

The sign—like the city which put it there—means what it says.

Proof is on the board itself, on a center line which lists in large figures (changed every midnight) the number of days since the last fatal traffic accident was recorded in St. Joseph.

At midnight, June 2, 1960, the signs at each end of town showed an impressive 2,132 days. The last fatal accident had been recorded on August 1, 1954. On June 2 it was just short of six years since either a local resident or an out-of-town traveler had met death on St. Joseph streets.

The following afternoon, a Friday, a 16 year old boy set out on his bike for the yacht club across the St. Joseph river from the downtown business area. The modern, divided, four lane bridge across the river was crowded with late afternoon traffic—workers heading back into town from a large plant on the other side of the river. At each end of the bridge policemen directed and slowed traffic.

The boy rode across on the bridge sidewalk, avoiding traffic lanes. Not quite midway, he looked back for a moment at his rear wheel, lost his balance and was thrown below the back wheels of a semi-trailer traveling across the bridge at less than 10 m.p.h. He was dead on arrival at the hospital.

That night police took down the impressive four number total on the signboards. Then they and local safety experts went back to work on the positive program of public education which had kept St. Joseph streets free of a fatal accident for nearly six years—the same one which had also seen not one St. Joseph man, woman, or child killed in traffic *away* from home since 1957.

Erected by the local Lions Club some years back at the suggestion of the Twin Cities Area Safety Council, and maintained by the local police department, the signs represent the cooperative spirit inherent in the program—a program which involves civic agencies, public officials, news sources and private citizens.

Before detailing the program, it might help to describe the traffic accident possibilities facing the city of St. Joseph. They are more serious than a first glance at the city statistics might indicate. The last census numbered only 11,690 citizens, but . . .

St. Joseph is the seat of Berrien County and the center of a market area involving two cities and two equally well populated residential areas in two separate townships — a home center involving 65,000 and more persons. Three bridges span the St. Joseph river between St. Joseph and its twin city of Benton Harbor—one of these carries more traffic every day than any

Alice M. Robison is a former editor of NSC's *Safety Education* magazine.

other spot in Berrien County.

Moreover, about a dozen industries are in, or ring, the city. Some of them draw employes from homes 16 to 20 miles away. These workers arrive by car, many driving through the downtown area. And many of them make the trip from and to home not only night and morning, but at the noon hour as well. This is a community where men go home to lunch.

Equally important, there is a 200 per cent increase in traffic through St. Joseph on highways U.S. 12 and U.S. 31-33 on holidays and summer weekends, as out-of-towners head through the city for upper Michigan lakes and vacation spots.

Thus accidents can, and sometimes do, happen here. A large map on the wall of the police department shows that 609 occurred on the city's streets and highways last year. It further shows that almost half of these happened along the two highways mentioned, as they cut through town. Many of the remainder occurred on the local streets at or near points at which they meet those highways.

Lt. Fred Walters of the police department, studying a sheet of day by day statistics, can tell you that Friday is the worst day of the week in St. Joseph for accidents and that any afternoon from 2 to 5 p.m. is the time period in which a citizen is most likely to become involved in a collision.

On the St. Joseph force 20 years, Walters has witnessed a constant rise in car ownership in town since World War II, a greatly increased population in the township areas whose residents come into town to shop, and the establishment or mushrooming growth of several important industries — all of which has multiplied the amount of traffic entering the city on a daily basis.

What is interesting is that despite this constantly increasing traffic flow, the number of accidents per year during the past decade has not increased. Instead it has hovered year by year around the figure 550-600.

This means that, during the decade, there has been a constant lowering of the traffic accident rate in St. Joseph. What has brought the improvement? Walters believes increased enforcement under Chief Tom Gillespie has assisted greatly. So has special attention to problem areas and dates—the men of the force work 12 hour shifts over the heavy Labor Day weekend, for example. But regular attention to public education in safety, part of it handled by men of the force themselves, has been most important.

Last year Chief Gillespie appeared before a number of civic groups to remind the community of the need for care behind the wheel. He could point out, on the basis of the figures kept by Walters, that such accidents as did happen were the result, not of excess speed, but rather of failure to yield the right of way and/or of following too closely.

The same safety message or some variation of it was repeated by police officers to student driving classes throughout the city—and to the general public in a total of 2,095 safety spots heard over two local radio stations last year. The message appeared in print as well — as the *St. Joseph Herald Press,* the *Benton Harbor News Palladium,* and the *South Bend Tribune,* all distributed locally, carried safety editorials or articles in their columns at the rate of three a week or more, with a total of four or five a month relating to traffic safety.

The man behind this traffic safety education is Harry Hatcher, head of the Twin Cities Area Safety Council, with offices in downtown St. Joseph. Hatcher carries his own news camera with him as he covers the city and area, and turns out an effective public relations job for safety seven days a week.

One result of Hatcher's camera work is a "This Is Your Life" program he has put together. Fifty-four times in the last two years—or on an average of once every second week—Hatcher has appeared before women's clubs in the twin cities to stage this program. It features color slides taken at the actual scenes of accidents and has already been witnessed by almost 1,500 persons. Hatcher is now accepting bookings for the year ahead.

One of the organizations which insures further interested bookings for Hatcher's traffic safety lecture is the family division of the Twin Cities Area Safety Council. Made up of 50 women who represent more than 3,000 from the area, this organization stages eight programs during an average year. The programs feature family, child and home safety, but seat belts and general traffic subjects rate heavy attention. In 1958 the area safety council won a

Shocked St. Joseph citizens view scene of accident which took the life of teen-ager — city's first fatality in almost six years.

Carol Lane certificate of merit for this family division.

Another of the programs initiated by the safety council which rates regular attention in the local press is the "safest city contest." Every 30 days for the last eight years, this contest has pitted each of the three major cities of the county against each other in a manner intended to help reduce the number of traffic accidents.

In this contest St. Joseph, Benton Harbor, and Niles compete for recognition. The cities are judged by their own police chiefs who meet once each month with Hatcher to compare the figures on traffic safety in each city with the identical month the year before. Each city is rated on percentage of improvement in safety index (the number of personal injury and fatal accidents, divided into the number of arrests for moving violations). The city showing the greatest improvement over the same month 12 months before is rated safest for that 30 day period.

It is interesting that despite the one fatality which ended St. Joseph's almost six year, no-fatal record in June, the city still won the safest city contest for June.

An important by-product of the contest is a monthly luncheon at which results are announced. The luncheon is attended by police chiefs, state police sergeants, sheriffs of the township and county areas—by enforcement personnel from 28 areas in Berrien County. Here they talk over ways in which they might improve the safety index of each community, exchange ideas and information for better enforcement and public education in the period immediately ahead.

Records kept by Hatcher show that during the eight years the contest has been carried on there have been 2,954 fewer accidents in the three cities involved than there would have been had the accident rate stayed at the 1952 level.

Police chiefs also cooperate with Hatcher in practical use of the annual Inventory of Traffic Safety Activities. Once results of the Inventory are back in Hatcher's hands, he makes résumés of relevant sections for interested officials and for the city commission. Study and consultation follow. Out of this have come modern street lighting programs, increased police manpower, better record keeping, increased attention to violators, and new use of traffic engineering techniques in the twin cities.

Constant Education

Day in and out, Hatcher is concerned with teaching street safety in the schools of the community. He starts in September with kindergarten and elementary school children, setting up a model intersection on several school playgrounds in turn.

Youngsters are brought to the playground intersection in busses, registered by women from the family division, then taken through the intersection in small groups on a planned demonstration tour. A police officer in uniform demonstrates traffic signals with a full size, portable, traffic light. The youngsters are given the practical experience of walking across intersections while there are turning cars and bikes in motion in the "street." They are also shown where to look for directional signals on vehicles.

In the past three years this program has reached 3,000 youngsters, not one of whom has since been involved in a pedestrian accident. And during the year the lessons learned on the playground intersection are reinforced through use of an intersection game devised for classroom use and available to all schools.

For third and fourth graders, Hatcher recommends the "Safest Way To School" program, a training kit which contains practical ideas on how to make the subject real for small pedestrians. An effective patrol program is in operation every day. It is supplemented by the walk-on-the-green project adopted in this city in 1953. Moreover, schools increasingly request from Hatcher the many safety films he makes available to the community—12 out of the total of 76 he lists for use are on traffic safety, nine cover child safety.

For high school students there is a driver education program now estimated to be reaching 88 per cent of those of age to take it. Traffic safety education for teen-agers is reinforced

To Page 49

In 1958 the family division of the Twin Cities Safety Council won a Carol Lane Award. Mrs. Warren Henke, 1958 chairman of division, (left); Carol Lane, and Mrs. Nylor Hartwig, the present chairman, are pictured at the award presentation.

Harry Hatcher, executive secretary of Twin Cities Area Safety Council (left); Justin J. Condon, president of same council, and Howard Pyle, president of National Safety Council, discuss St. Joe's current and future traffic safety program.

Carol Lane Awards

HONOR WOMEN'S PROJECTS

THE National Safety Council has announced the winners in the 1960 Carol Lane Awards for Traffic Safety.

First-place awards went to the Altrusa Club, Poplar Bluff, Mo., for cities under 25,000 population; the women's division of the Toledo-Lucas County Safety Council, Toledo, Ohio, for cities of more than 25,000 population, and Mrs. Victor W. Haflich, Garden City, Kan., for a statewide program.

Each first-place winner will receive a $1,000 U.S. Savings Bond and a bronze statuette.

The awards, named for the women's travel director of Shell Oil Co., are the only national recognition given women and women's organizations for accomplishments in traffic safety. They are presented for significant contributions to the preservation of life through development and direction of effective traffic safety programs. The awards are administered by the National Safety Council through a Shell grant.

The Altrusa Club of Poplar Bluff, Mo., won the award for its "Driver of the Week" contest to promote safe driving among teenagers. During the year the program was initiated, the number of teenagers involved in traffic accidents in the city fell 28 per cent below that of the previous year.

The women's division of the Toledo-Lucas County Safety Council was honored for helping to organize the county safety council. Realizing that Lucas was one of the few Ohio counties without a safety council and that Toledo had several safety organizations, the women effected a merger of safety groups into the county council—a bigger and more effective organization.

A personal campaign to modernize Kansas traffic laws won the award for Mrs. Victor W. Haflich, Garden City, Kan. Mrs. Haflich enlisted the support of 25 statewide organizations in her drive to obtain a new driver license law and other traffic legislation.

Second and third-place award winners among cities under 25,000 population were the Pilot Club, Lawrenceburg, Tenn., and the Soroptimist Club, Virginia, Minn., respectively.

Among cities of more than 25,000 population, second and third-place winners respectively were Miss Rozell Fair Fabiani, a television producer of Columbus, Ga., and Mrs. Sadie Ward, Tacoma, Wash.

Winning second and third-place awards for statewide programs were Mrs. Ezell Redmon, Roswell, N. M., and Mrs. Marvin M. Craig, Onarga, Ill., respectively.

Each second-place winner will receive a $500 U.S. Savings Bond and a bas-relief plaque. Third-place winners will receive a $250 Savings Bond, and a plaque.

Certificates of merit were awarded these women and womens' organizations:

Arizona—Mrs. A. Monroe Blakely, 5645 Solano Dr., Phoenix.

California—Mrs. Norman L. Hawkins, Jr., 4080 Legion Ct., Lafayette.

Colorado — Safety Committee of School Advisory Board, and Parent-Teachers Association, Estes Park.

Florida — St. Petersburg Woman's Club, 40 Snell Blvd., St. Petersburg.

Georgia—Women's Auxiliary to the Upson County Medical Society, Thomaston.

Illinois—Business and Professional Women's Club, Mt. Vernon; District 111 Parent-Teachers Association Safety Committee, Oak Lawn.

Iowa—Mrs. Jim Hatfield, Red Oak; Mrs. Lillian Brodkey, 3420 Pierce St., Sioux City.

Kentucky—Women's Division, Louisville Safety Council, 214 Speed Blvd., Louisville.

Louisiana—Gentilly Woman's Club, 1624 Mirabeau Ave., New Orleans; Mrs. Lillian Patti, 5517 Elyria Fields Ave., New Orleans.

Maryland—Mrs. Gloria Baer, 4210 Arizona Ave., Baltimore.

Michigan — Women's Division of Safety Council of Greater Lansing; Family Division of Twin Cities Area Safety Council, St. Joseph.

Mississippi — The Century Club, Amory; Business and Professional Women's Club, Charleston.

Nebraska — VFW Auxiliary #926, O'Neill.

New Mexico—Business and Professional Women's Clubs, Alamagordo; Pilot Club, Grants.

North Carolina—Junior and Senior Women's Club, Smithfield.

Ohio — Business and Professional Women's Club, Canton; Business and Professional Women's Club, Circleville;Women's Division, Mayor's Traffic Safety Education Committee, Cleveland; Mrs. Roderick Ross, 749 Brice Ave., Lima; Shelby County Registered Nurses Association, 214 N. Walnut St., Sidney; Junior Women's Club, Willoughby; Diocesan Council of Catholic Women, 144 W. Wood, Youngstown; Mrs. Dean O. Jones, 539 W. Princeton Ave., Youngstown.

Oklahoma — Logan County Home Demonstration Council, Guthrie; Texas County Home Demonstration Council, Guymon; Social Service Department, Lawton Woman's Forum, Lawton.

Pennsylvania—The Mother's Safety Patrol, Macungie; Claire Gilles, John Bartram High School, 67th St. and Elmwood Ave., Philadelphia.

Tennessee—Benton County Council of Home Demonstration Clubs, Camden.

Texas—Mrs. Jay R. Endicott, Jr., 517 Driftwood, Corpus Christi; Women's Department, Chamber of Commerce, El Paso; Flato School Parent-Teachers Association, Kingsville; Mrs. Elizabeth W. Estes, Lorena; Mrs. J. Davis Armistead, 2123 55th St., Lubbock; Mrs. Jack S. Kennerly, Orange.

Virginia — Mrs. T. Brooks Mims, Rt. 1, Luray.

Washington—Puppet Hollow Associates, Bellevue.

West Virginia — Women's Civic League, New Martinsville.

AMUSEMENT DEVICE PLUGS DRIVING SKILL

You're cruising along at highway speed. You round a curve. Coming out of it, you push down on the gas. Suddenly, the curve leads to a bridge and dead ahead is a stalled truck. You may not be able to stop in time, but no one will be killed or injured, no vehicles will shatter the air as they clash; no siren will wail across the countryside, for this time it's only a game—called Auto Test.

The coin-operated amusement device uses an authentic auto dashboard, steering wheel and brake and accelerator pedals. The machine employs a projector to show filmed traffic situations on the driver's "windshield." A tape recorded sound track is also run with the film. During these simulated driving conditions, the customer or contestant is asked to match his driving skill with an automatically controlled "red phantom" car as the two "drive" from coast to coast.

The device is also equipped with a governor and a speedometer that really work. If the contestant speeds his "vehicle," the governor automatically cuts off the film until the driver resumes a more reasonable speed. If the player is to arrive at his destination ahead of the phantom car, he must brake his own car when encountering an emergency traffic situation. Each time he reacts properly to an emergency the scoring system advances his car toward his goal. Depressing the accelerator will run the film faster thus causing the emergency situations to arise faster and requiring quicker reaction by the contestant. If all emergencies are met properly and a safe speed is maintained, the contestant beats the red phantom car across the country.

Safety Promotion

Auto Test was originally designed for installation in such places as rail, air, and bus terminals, shopping centers, amusement parks and bowling alleys—places where amusement devices are usually found and where teenagers congregate. Since the game is based on safe driving practices, it has been used in the promotion of traffic safety at expositions and auto shows. Local safety councils have often borrowed or rented units to draw attention and to help pay for campaigns and safety shows.

At a recent Canadian National Exhibition, over 60,000 people played the Auto Test game. At last winter's Chicago Auto Show a bank of 24-units was used by an automobile manufacturer. Driver reactions to 25 emergency situations were recorded on a 100 ft. "toteboard" where miniature cars moved ahead with each correct reaction.

The taped sound track makes it possible to incorporate an individualized traffic safety message or other short commercial. This—plus the NSC traffic safety posters which accompany each installation—has proved to be a door-opener for the machines in many a civic-minded, safety-conscious store.

The fact remains, however, that when a coin is dropped into one of these machines, be it at a traffic safety exposition or in an amusement arcade, a safety message is aired—and it is paid for. Financially, the machine is a campaign tool capable of standing on its own. When used in a safety campaign or show, while drawing attention and plugging traffic safety, the machine pays its own way.

News from Capitol Hill

From Page 23

The ICC denied a petition by five railway labor unions, requesting the Commission to inaugurate a general investigation of the transportation by motor vehicle of petroleum, petroleum products, and other dangerous flammable liquids, as well as of the frequency, causes, and results of collisions between such vehicles and railroad trains.

The unions stated that the principal object of such an investigation should be the determination of what rules, regulations, facilities, or other actions are feasible and necessary to prevent such collisions.

In its order of denial, the ICC stated that it did not appear that constructive changes would result in the regulations from a general investigation, and that the encouragement of uniform safety laws and regulations and uniform enforcement of such laws and regulations by the states "appears . . . to be the most effective present means for improvement of the situation."

Congressman Van Zandt (Pa.) took exception to this ruling and announced his plan to propose in the next Congress a "full-dress investigation of grade-crossing accidents and what the ICC is doing to eliminate them."

BOOSTER MATERIALS

ORDERS FOR NEW POSTERS SHOWN CANNOT BE SHIPPED UNTIL AFTER JANUARY 1

"Keep Christmas in Your Driving" is the 1960 Holiday Emphasis Program theme. In keeping with the spiritual significance of the season, the program stresses moral aspects of safety. Religious, safety and civic groups are urged to aid in making the holidays safe. The program can be a means of arousing public awareness of holiday hazards and the personal responsibility of drivers and pedestrians. A special, free Christmas kit to implement your community's program is now available.

The Christmas Holiday Kit includes:

Poster and leaflet: "SAFETY EVERYWHERE . . . all the time" theme of "Safe Holidays."*

Poster: "Thou Shalt Not Kill"*

Leaflet: "Open Before Christmas"*

Booklet: "Be a Winter Winner" (Winter Driving)*

Covering letter: Arthur B. Langlie's letter to religious and civic leaders on Holiday Emphasis Program.

TRAFFIC SAFETY Reprint: fact sheet on "Holiday Hazards."*

HOME SAFETY REVIEW Reprints: "Share Safety at Christmas," "Accidents That Happened During the Holiday Season," "Choose Toys That Teach," and an article on parental responsibility in teaching of safety to children.

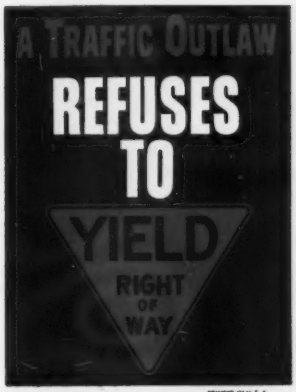
News Releases: "Dry Up the Office Party," editorial feature on holiday program.

For your free kit, write:

Christmas Holiday Safety Campaign
National Safety Council
425 North Michigan Avenue
Chicago 11, Illinois

*May be purchased separately, Kit includes order form.

NEW TRAFFIC POSTERS FOR FEBRUARY POSTING



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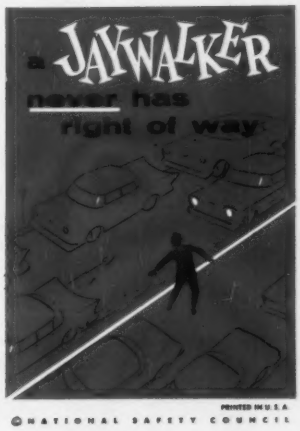
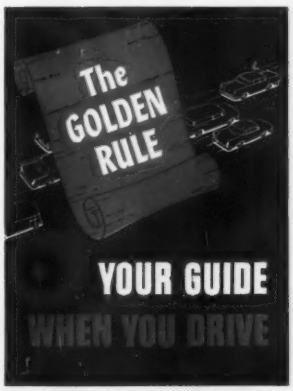
T-2052-A 8½x11½



T-2053-B 17x23

ALTERNATE POSTERS FOR FEBRUARY POSTING

(These posters may be ordered for immediate delivery)



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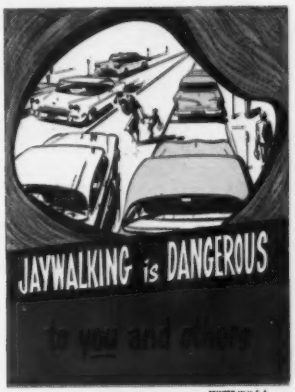

T-1544-B 17x23

PRICES FOR ABOVE POSTERS

Traffic Posters—T-prefix to number

	1-9	10-99	100-999	1000-4999*
A Size	$0.17	$0.12	$0.07	$0.06
B Size	.30	.20	.165	.132
C Size	.40	.30	.24	.22

YOUR CREDIT LINE can be imprinted at time of the press run on Traffic B and C posters only. Orders for imprints on February posters above must be received by December 10, 1960.

Imprinting charges for these posters are $2.25 per lot plus an initial charge for each electroplate of $21.00 for C poster imprint and $12.50 for B poster imprint.

*Write for prices on quantities of 5,000 or more for special rates on annual poster orders.

PRICES SHOWN ARE SUBJECT TO A DISCOUNT OF 10% TO NATIONAL SAFETY COUNCIL MEMBERS

FLEET POSTERS

POSTER PRICES

Posters illustrated on these pages are included in the automatic Motor Transportation poster services. Automatic poster sets are available on yearly subscription that provides (4) subjects per month viz. (2) "A" size (8½"x11½") and (2) "B" size (17"x23"). 281.31 Automatic service is provided in the following categories:

City Truck	City Bus	Annual price 1-4 sets, $9.90; 5-49, $7.80; 50 or more, $6.44.
Intercity Truck	Intercity Bus	
Sales Truck	Taxicab	
Truck Terminal	Bus Terminal	

Posters are available for individual selection at the following prices:

	1-9	10-99	100-999	1000-4999*
A size, any selection	.17	.12	.07	.04
B size, any selection	.32	.23	.195	.155

All prices shown are subject to a 10% discount to National Safety Council Members. *Write for prices on quantities of 5,000 or more. See page 29 for prices of posters with T-prefix.

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V-2013-B 17x23

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1479-B 17x23

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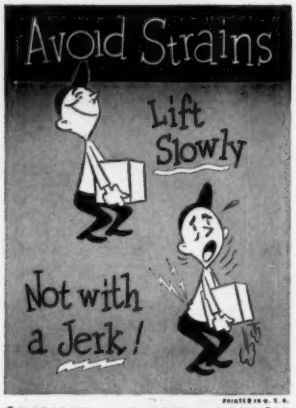
1752-B 17x23



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1290-A 8½x11½

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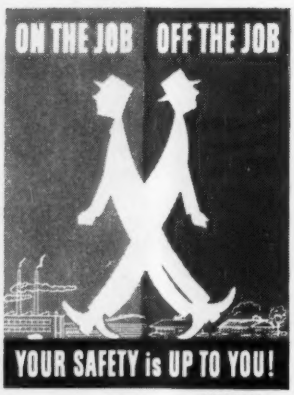
0376-A 8½x11½



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1624-A 8½x11½

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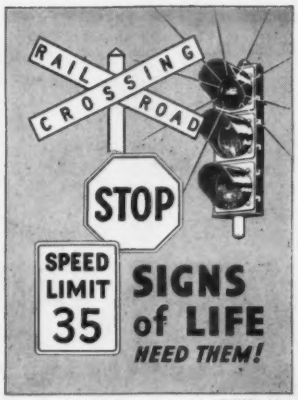
1022-A 8½x11½

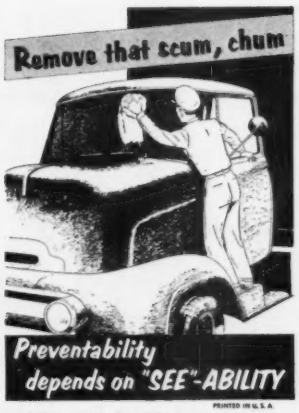
V-2012-B 17x23



V-9799-A 8½x11½

V-2014-A 8½x11½

V-0613-B 17x23



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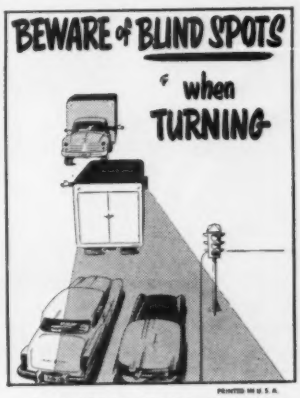

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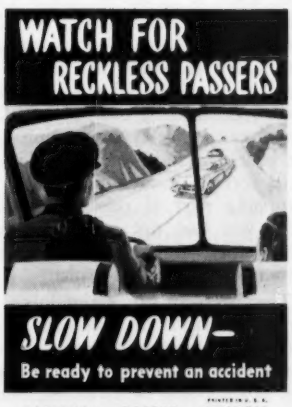

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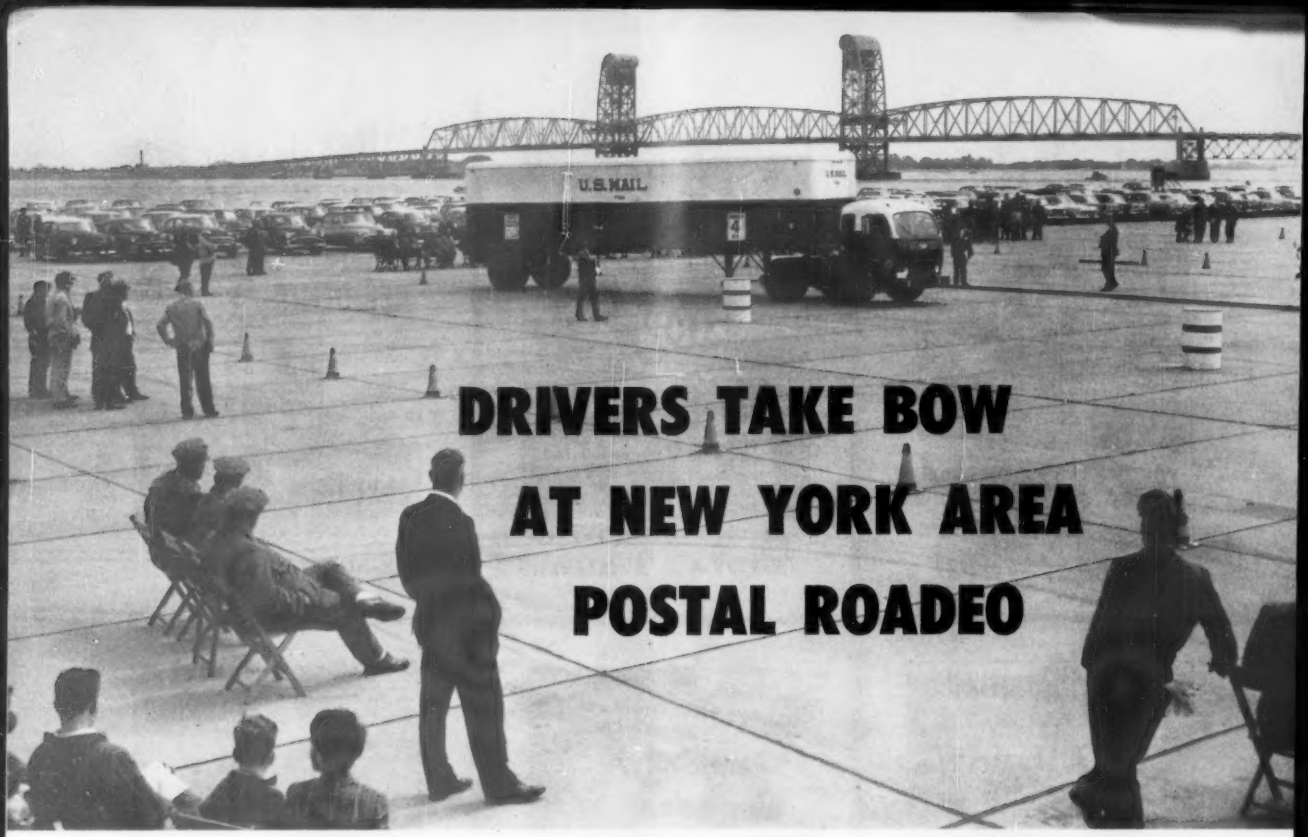

DRIVERS TAKE BOW AT NEW YORK AREA POSTAL ROADEO

by Harry L. Becht

IT HAD BEEN a stiff competition, but Harold Jones had put his half-ton courier through the roadeo paces in expert fashion—and the cheers of the crowd had registered approval of each maneuver.

Driver Jones parked his vehicle neatly, slid from behind the wheel and headed for the stands—to join his family and watch his fellow drivers in the remaining events.

As Jones stepped from the field, a 10-year-old hurricane came dashing towards him. The boy threw his arms around the driver's neck, shouting, "Pop, you were the greatest!"

At that moment, neither father nor son knew that Jones would be judged champion half-ton courier driver of the roadeo. But, champion or not, Pop was a hero in his son's eyes—and that was the most important thing.

This scene took place at the 1959 New York Area Postal Roadeo. Similar exchanges occurred between other fathers and sons at that roadeo—and were repeated again at the 1960 roadeo.

For 1959 was the year that the New York Area Postal Roadeo became a family affair, with every Pop the hero of the day, and his proud family his rooting section.

From that standpoint alone, the whole roadeo program would have been well worth while.

But the program has many more benefits—benefits well recognized by the department and other agencies.

It has been so successful that we have received inquiries from many sources, most of them from employers who would like to set up similar roadeos for their own employes. This article is intended to help those who have sought our aid and any others who may wish to establish roadeos. Probably the best way to give pointers on the subject is just to tell the story of our own roadeo.

Contestants in the New York City Area Post Office Department 1960 Roadeo were selected from 6,280 drivers who operate vehicles 23,161,104 miles per year in city traffic. From 1958 to 1960 these drivers reduced their accident experience by 32 per cent.

Generally, a truck roadeo is sponsored and promoted by management of trucking organizations. But in our case, impetus for the program came from the employes. The drivers, too often considered as a "mechanical" part of a motor transportation unit, said in effect: "We want a roadeo."

In 1957 a group of tractor-trailer operators assigned to the Post Office Long Island Truck Routes—the men who move the mail the length and breadth of Long Island — requested a show of skill by competition. Drivers of two other transportation units, the Brooklyn and New York City Vehicle Service, joined the event. The surprising part of this driver enthusiasm was that not one of the drivers in these units had ever seen or participated in a truck roadeo.

The problem of maintaining this driver enthusiasm was *what, when, where* and particularly *how*. The *what* was easy. The answer was a roadeo. The *when* could be arranged, but the *where* would take some doing. Space and equipment were needed. The *how*

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was a major obstacle. The drivers had never seen nor participated in a roadeo, neither had postal officials who wanted to assist.

We were fortunate in locating an ideal situation. The Continental Air Command, Department of the Air Force, Mitchel Air Force Base, Long Island, N. Y. were planning their area elimination roadeo. The equipment, judges, organization, etc. were available. Col. M. A. Elkins, the base commander, was most generous. He invited us to move in at the conclusion of their events.

The spirit of our tractor-trailer competition could not be surpassed. The drivers contributed toward the purchase of a winner's trophy, invited the "brass" and practiced every minute on the road. The accident frequency rates for these units during the qualification period was the lowest in their history. The sportsmanship and all the cheers of the military personnel who watched the postal drivers with the "cab over engine" tractors wiggling the big ones around will not be forgotton. When our champion dropped the box into the parallel parking for a perfect score on the first try there was not one person who didn't cheer.

At the conclusion of this "partial" Roadeo we couldn't help but be concerned about whether or not the enthusiasm would last.

The following year, 1958, the Air Force discontinued their roadeo. To produce our own roadeo would take some doing. We needed space, equipment, organization, support, etc. Driver enthusiasm had not made enough of an impression on management.

We decided to skip a year. We were sorry we did. From every area drivers asked, "Why?" Everyone felt like a champ and wanted to prove it. As a result we set up a roadeo year and planned our 1959 contest.

Drivers built the equipment. Drivers challenged each other. Drivers talked it up. Drivers from other areas requested consideration for participation. Our roadeo became a professional contest.

Interested private organizations voluntarily contributed prize trophies. The New York City Parks Department permitted the use of the old world's fair parking field. Bleachers and

To Page 50

Jamaica driver with his 1/2 ton Courier in diminishing clearance event.

Melvin Slack, two year consecutive winner of the tractor-trailer championship, is congratulated by John Ward (left), Vehicles Services, and Postmaster Robert K. Christenberry of the New York City Post Office.

Measuring Staten Island driver's parallel parking of his 3/4 ton truck.

PROFILE OF A SAFE DRIVER

Experts test country's top drivers, pinpoint attitudes and habits that put them in "outstanding" class

JUST what kind of person *is* a safe driver?

Chances are he's satisfied with his job and happy at home. He looks ahead—is the type who plans for retirement and other phases of his own and his family's future. Generally, he is noncompetitive and nonaggressive.

This thumbnail sketch of the safe driver was given by Dr. James L. Malfetti, executive director of a Columbia University project established to determine the outstanding characteristics of a safe driver.

How about his behavior on the road?

Dr. Malfetti says the study shows the safe driver is extremely courteous to pedestrians and other motorists. He signals his intentions by the position of his vehicle and by hand and automatic signals. He makes minimum use of acceleration and braking because he anticipates well what has to be done and, therefore, drives more carefully.

More than 5,000 National Safety Council 20-year-award winning drivers participated in the study, which was sponsored by the DuPont Co.'s *Telar* anti-freeze and summer coolant. The Safety Research and Education project of Teachers College, Columbia University, administered the program in cooperation with the National Safety Council, Remington Rand and Dodge Division, Chrysler Corp.

The 5,000 professional drivers—who answered a special questionnaire which was prepared by Columbia, distributed by the National Safety Council and processed by Remington's Univac division—are part of a total of nearly 9,000 who have won the Council's safe driving award for 20 or more years. They represent the top drivers of the 298,000 drivers covered by the Council's award program.

The 5,000 hail from every state in the nation and represent business organizations, freight carriers, delivery companies, national, state and local governmental agencies, utility companies, food companies, express firms, interstate and intrastate bus lines and school bus companies.

From this group six semi-finalists were chosen. Their selection was based on an electronic scoring system which ranked the thousands of participants and produced data to help set basic screening criteria.

Included in the selection criteria were such driver requirements as the following: (1) must have driven at least 20,000 miles professionally during 1959; (2) must have driven under all types of road conditions—urban streets, rural roads and limited access highways—so that conditions of exposure to accidents and violations could be equated; (3) must have driven under both day and night conditions; (4) must not have had more than one non-preventable accident during his entire personal and professional career; and (5) must have no traffic violations of any type during his entire professional career and no moving violations and not more than one non-moving violation during his entire personal career.

The semi-finalists were: Arthur R. Brown, a driver for the Railway Express Agency, Cleveland; Charles J. Espich, a driver for the Navajo Freight Lines, Denver; Clint C. Hennig, an employe of the Community Public Service Co., Fort Worth, Tex.; Alex J. Keilen, a Minnesota Highway patrolman: Jeff B. Vance, a driver-sales-

man for the Interstate Bakeries Corp. of Cincinnati, and Alton Van Velde, a driver-salesman for the Canteen Co., East Syracuse, N. Y.

These six men assembled in Chicago on the weekend of Sept. 23-25 for an intensive battery of tests encompassing medical, psychological, safety education and driving performance criteria.

The tests were directed by Dr. James L. Malfetti, executive director of the Columbia project. Assisting him were: Prof. Amos E. Neyhart, director of the Institute of Public Safety, Pennsylvania State University; Dr. Ralph W. Heine, professor of psychology at the University of Chicago and past president of the Illinois Psychological Association, and Dr. George Howard Irwin, medical director of the Chicago Transit Authority and a member of the Industrial Medical Association's committee on medical standards for motor vehicle drivers.

The tests covered a total of 12 hours —two hours devoted to medical tests, two hours to driving performance and four hours each to psychological and general information tests. Each of the supervising specialists ranked the six semi-finalists in terms of over-all qualifications. The ranks assigned each candidate by each specialist were totalled and the sum of the ranks served as the candidate's score.

Among the factors measured were: (1) reaction time, coordination, speed and dexterity; (2) psychological attitudes toward driving and safety in general; (3) decision-making ability; (4) sense of humor; (5) predominant mood and frequency of mood change; (6) general driving control; (7) timing; (8) anticipation of hazardous traffic situations; (9) knowledge of laws and regulations governing conduct on the road, and (10) knowledge of first-aid procedures on the highway.

On the basis of these tests the two finalists were selected. They were Charles Espich, the long-haul truck driver from Fort Wayne, and Alex J. Keilen, the Minnesota Highway patrolman.

Espich has driven for Navajo Freight lines for 18 years. He has been driving professionally for 42 years. Seventy per cent of his driving has been at night on a run from Fort Wayne, Ind. to Chicago. He has won the Na-

HERE'S THE "PROFILE"

(Based on results of questionnaire given to 5,000 National Safety Council Safe Driver Award winning drivers.)

THE safe driver is approximately 57 years old, is married and has two children. He has been driving professionally for 32 years and has worked for the same employer for 30 years. He has completed at least two years of high school and probably has no military service (he was too young for World War I and too old for World War II).

He has compiled the remarkable record of never having a single traffic violation in his professional or personal driving career. Last year he drove about 18,000 on-the-job miles and added another eight thousand in personal driving.

Less than 20 per cent of his professional driving is done at night, while almost a third of all his personal motoring is done after dark. He probably drives a truck and has won a National Safety Council Award for at least 23 of his 32 years on the job.

HERE ARE MEN WHO FIT IT

The two top drivers in competition, Charles J. Espich (left) and Alex J. Keilen, are pictured beside test drive car after winning finals.

Line-up of champions—semi-finalists pause before matching skill. From left to right they are: Alex J. Keilen, Arthur A. Brown, Clint C. Hennig, Alton Van Velde, Jeff B. Vance and Charles J. Espich.

tional Safety Council's Safe Driver Award for 28 consecutive years.

Keilen has been a highway patrolman for the past 25 years, and drove a total of 33,000 miles last year. He has received the NSC Safe Driver Award for 25 years.

As this issue of TRAFFIC SAFETY went to press, the final stage of the program had not taken place. This was to be a two-man performance competition over a route between Fraser, Colo. and Furnace Creek in California's Death Valley and was to be held the early part of October.

On this test drive such skill-testing equipment as tachographs, accelerometers and brake pressure gauges were to be used, and information obtained through their use was to be combined with observation ratings made by a monitor team of two safety experts riding with the finalists.

A future issue of TRAFFIC SAFETY will carry the story of the final test run.

Development of the project and the performance drive were outgrowths of the Du Pont Co.'s testing program for *Telar* anti-freeze and summer coolant which was introduced earlier this year.

The drive from one of the highest and coldest spots in the United States to the lowest and hottest area was adopted to emphasize the product's longevity and winter-summer performance. The route encompasses virtually every type of driving, road and weather condition.

It is expected that this first national program to determine the characteristics of safe drivers will serve as a pilot program, and that further study in depth will be made of several hundred drivers over an extended period of time. Such research would result in a "profile" of the safe driver which could be incorporated by Columbia into its over-all studies of average drivers and traffic violators to develop techniques which might be used—by licensing authorities, fleet operators, insurance underwriters and others — to predict safe and unsafe drivers.

The Columbia Questionnaire given to the 5,000 NSC award winning drivers—which covered 22 key information areas ranging from number of miles driven to company and personal accident and safety records—resulted in a preliminary "profile" which substantiated some widely held views of driver behavior.

One of these was the belief that men who drive carefully on the job also do so in personal driving.

Said Dr. Malfetti: "Safety experts have long known that the basic personality of the driver is the only variable successfully related to accident frequency.

"Preliminary results support another widely held theory—that 'man drives as he lives.' Supposedly, a man who drives carefully on the job does so because of patterns established in his personal driving."

Traffic safety experts at semi-finals included: (seated left to right) Dr. Ralph W. Heine of University of Chicago, Dr. George Howard Irwin of the Chicago Transit Authority and Dr. James L. Malfetti of Columbia University, project director; (standing) William G. Johnson of the National Safety Council, Edward J. Emond of Armour and Co., Jerome Fine of Columbia and Alfred C. Finch of the National Safety Council.

A. F. Malo Elected President of ITE

A. F. Malo, director of Detroit's Department of Streets and Traffic, was elected president of the Institute of Traffic Engineers at the 30th annual meeting of the organization held in Chicago, September 12-15, 1960.

Gordon K. Gravelle, deputy commissioner of the New York City Department of Traffic, and Robert A. Burch, state traffic engineer of North Carolina were elected vice presidents at the meeting.

Selected secretary-treasurer in the only contested phase of the election was J. Al Head, assistant state traffic engineer of Oregon.

Also chosen as members of the Institute's board of directors were: A. L. Hutchinson, assistant general manager of the Los Angeles Department of Traffic; Fenton G. Jordan, city traffic engineer of Norfolk, Virginia, and Herbert B. Woodling, city traffic engineer of Akron, Ohio.

Other members of the board of direction, carried over from last year, are: Fred W. Hurd, director of the Yale University Bureau of Highway Traffic, New Haven, Conn.; O. K. Normann, deputy assistant commissioner for research, U. S. Bureau of Public Roads, Washington, D. C.; and Evan E. Olmstead, traffic engineer of the Chicago Transit Authority.

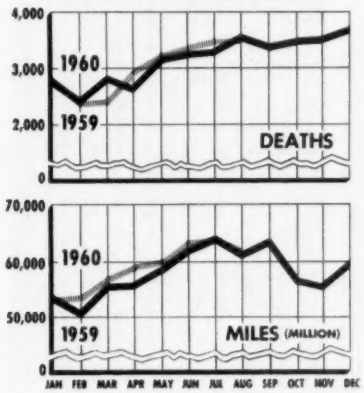
Last year's president, Edward G. Wetzel, special assistant to the director of port development of the Port of New York Authority, remains on the board of direction in his capacity as immediate past president.

From Page 8

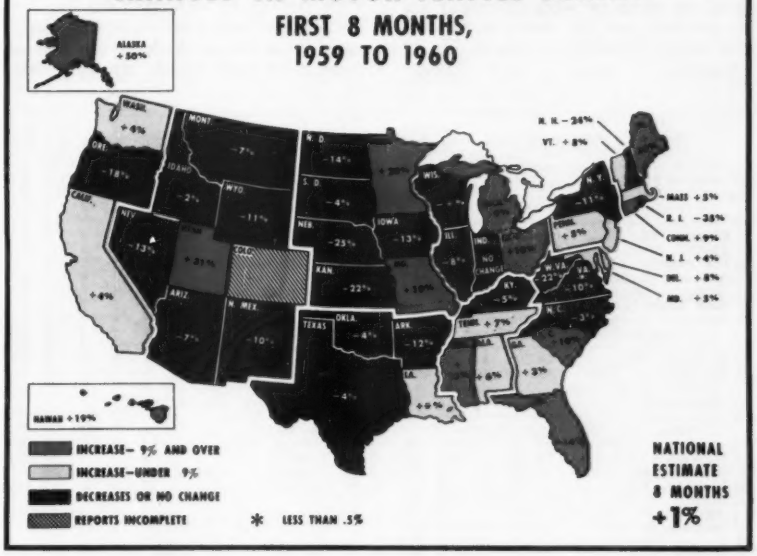
ranked according to the number of deaths per 10,000 registered vehicles, were:

	Reg. Rate	Pop. Rate
Group I (Over 1,000,000 Pop.)		
Chicago, Ill.	2.4	6.5
Detroit, Mich.	2.8	9.6
Los Angeles, Calif.	3.0	16.2
Group II (750,000 to 1,000,000 Pop.)		
St. Louis, Mo.	2.4	8.6
San Francisco, Calif.	2.8	10.6
Washington, D. C.	3.6	9.6
Group III (500,000 to 750,000 Pop.)		
Milwaukee, Wis.	1.4	6.1
Seattle, Wash.	1.4	7.0
Houston, Tex.	1.9	11.2
Group IV (350,000 to 500,000 Pop.)		
Denver, Colo.	1.9	11.0
Oakland, Calif.	1.9	7.8
Columbus, Ohio	2.2	7.8
Group V (200,000 to 350,000 Pop.)		
Providence, R. I.	0.6	3.0
Wichita, Kan.	0.6	4.0
Grand Rapids, Mich.	0.8	4.2
Group VI (100,000 to 200,000 Pop.)		
Wilmington, Del.	0.8	4.1
Lansing, Mich.	0.8	4.0
Saginaw, Mich.	0.8	4.1
Group VII (50,000 to 100,000 Pop.)		
Topeka, Kan.	0.0	0.0
Schenectady, N. Y.	0.0	0.0
Colorado Springs, Colo.	0.0	0.0
Group VIII (25,000 to 50,000 Pop.)		
Whittier, Calif.	0.0	0.0
Plainfield, N. J.	0.0	0.0
Appleton, Wis.	0.0	0.0
Group IX (10,000 to 25,000 Pop.)		
Boulder, Colo.	0.0	0.0
Greeley, Colo.	0.0	0.0
Ft. Pierce, Fla.	0.0	0.0

MONTHLY MOTOR VEHICLE DEATHS AND TRAFFIC TRENDS 1959-1960



CHANGES IN MOTOR-VEHICLE DEATHS
FIRST 8 MONTHS, 1959 TO 1960



MOTOR VEHICLE DEATHS AND CHANGES

Months	DEATHS				PERCENTAGE CHANGES				
					Corresponding Month			4 Mos. Mov. Ave.*	
	1956	1958	1959	1960	1956-1960	1958-1959	1959-1960	1958-1959	1959-1960
January	2,954	2,709	2,790	2,850	— 2%		+ 2%		0%
February	2,652	2,398	2,430	2,380	—10%		— 2%		0%
March	2,940	2,598	2,860	2,400	—18%		—16%		— 3%
April	2,970	2,595	2,650	2,910	— 2%		+10%		— 2%
May	3,094	2,937	3,110	3,230	+ 3%		+ 4%		— 1%
June	3,338	3,078	3,260	3,320	0%		+ 2%		0%
July	3,555	3,098	3,250	3,450	— 3%		+ 6%		+ 5%
August	3,535	3,550	3,510	3,470	— 2%		— 1%		+ 3%
8 Months	25,038	22,963	23,860	24,010	— 4%		+ 1%	+ 3%	
September	3,653	3,325	3,360			+ 1%		0%	
October	3,476	3,586	3,440			— 4%		— 1%	
November	3,603	3,526	3,490			— 1%		— 1%	
December	3,858	3,581	3,650			+ 2%			
Total	39,628	36,981	37,800						

All 1956 and 1958 figures are from the National Office of Vital Statistics. The 1959 and 1960 figures are National Safety Council estimates.

The 1960 national estimate is arrived at by assuming that the percentage change from 1959 to 1960 in the states reporting for both years reflects the 1959-1960 change in the entire country. First reports are prelimnary, so revisions are made from time to time as later reports are received for the various months. Thus, figures above for 1960 may differ slightly from figures for the same months which will be published in future issues of TRAFFIC SAFETY.

*Four Months Moving Average is based on changes between the totals for four months instead of one month. For example, the August figure shows the change between the totals for May-August 1959, and May-August 1960, etc. Adding several months together tends to smooth out single month changes which may be affected by differences in the number of weekends in a month from one year to the next, random variations, etc.

TRAFFIC DEATHS—CITY RECORDS

The table covers only motor-vehicle deaths resulting from traffic accidents that occurred in the city. Nontraffic motor vehicle deaths (where the accident occurred on home or work premises) are not included; nor are deaths in the city from accidents occurring outside.

Rankings are based on the 1960 registration death rate which is the number of deaths per 10,000 registered motor vehicles on an annual basis. Vehicle registration figures are for the year 1959 and were supplied by R. L. Polk & Co.

Cities are ranked by registration death rates—from low to high. When two or more cities have exactly the same rate, ranking is by total vehicle registrations—from large to small.

Cities shown in heavy type have improved in 1960 compared with 1959.

The population death rate is the number of deaths per 100,000 population on an annual basis. Populations are as of April, 1950, or later censuses taken by the U. S. Bureau of the Census.

	Eight Months 1960	1959	1958	1960 Reg. Rate	1960 Pop. Rate
ALL REPORTING CITIES				2.2	8.9
Group I (1,000,000 and over)					
1. Chicago, Ill.	161	188	191	2.4	6.5
2. Detroit, Mich.	123	110	95	2.8	9.6
3. Los Angeles, Calif.	243	216	225	3.0	16.2
All cities in this group				3.2	8.7
4. Baltimore, Md.	77	67	78	3.6	11.2
5. New York, N. Y.	368	451	394	4.0	7.1
Group II (750,000 to 1,000,000)					
1. St. Louis, Mo.	49	51	34	2.4	8.6
2. San Francisco, Calif.	55	60	39	2.8	10.6
All cities in this group				2.9	9.6
3. Washington, D. C.	54	38	37	3.6	9.6
Group III (500,000 to 750,000)					
1. Milwaukee, Wis.	29	32	25	1.4	6.1
2. Seattle, Wash.	27	32	42	1.4	7.0
3. Houston, Tex.	53	76	61	1.9	11.2
4. Buffalo, N. Y.	35	30	39	2.3	8.8
All cities in this group				2.3	9.5
5. Minneapolis, Minn.	36	21	28	2.6	10.4
6. Dallas, Tex.	54	43	48	2.7	13.9
7. Boston, Mass.	32	42	37	2.8	6.6
8. Cincinnati, Ohio	42	37	31	2.9	10.9
9. Pittsburgh, Pa.	41	30	42	3.1	9.1
10. San Diego, Calif.	43	47	56	3.2	12.9
Group IV (350,000 to 500,000)					
1. Denver, Colo.	35	30	27	1.9	11.0
2. Oakland, Calif.	20	37	30	1.9	7.8
3. Columbus, Ohio	25	22	28	2.2	7.8
4. Indianapolis, Ind.	33	26	21	2.2	10.7
All cities in this group				2.6	11.2
5. Birmingham, Ala.	26	32	24	2.7	10.9
6. San Antonio, Tex.	42	33	32	2.9	13.8
7. Atlanta, Ga.	39	56	46	3.1	11.9
8. Memphis, Tenn.	36	21	16	3.1	11.1
9. Louisville, Ky.	33	30	32	3.2	12.1
10. Phoenix, Ariz.	43	34	23	3.4	15.0
Group V (200,000 to 350,000)					
1. Providence, R. I.	5	10	12	0.6	3.0
2. Wichita, Kan.	6	7	9	0.6	4.0
3. Grand Rapids, Mich.	6	12	10	0.8	4.2
4. Miami, Fla.	16	29	30	1.1	9.3
5. Omaha, Neb.	9	22	17	1.2	4.9
6. Rochester, N. Y.	12	4	13	1.3	5.2
7. Syracuse, N. Y.	8	8	9	1.6	5.6
8. Norfolk, Va.	11	8	15	1.8	5.7
9. Toledo, Ohio	19	10	12	1.8	8.3
10. Akron, Ohio	16	21	32	1.9	7.8
All cities in this group				1.9	9.1
11. Fort Worth, Tex.	23	23	19	2.1	10.5
12. Dayton, Ohio	22	14	15	2.2	11.0
13. Richmond, Va.	18	15	17	2.3	11.4
14. Flint, Mich.	17	9	10	2.3	11.8
15. Worcester, Mass.	9	17	8	2.4	6.7
16. Tampa, Fla.	22	20	17	2.4	12.2
17. Honolulu, Hawaii	26	29	14	2.6	15.7
18. Oklahoma City, Okla.	33	16	18	2.7	17.4
19. Long Beach, Calif.	30	18	21	2.9	13.4
20. El Paso, Tex.	18	26	32	3.1	10.8
Group VI (100,000 to 200,000)					
1. Wilmington, Del.	3	4	7	0.8	4.1
2. Lansing, Mich.	3	6	6	0.8	4.0
3. Saginaw, Mich.	3	2	3	0.8	4.1
4. Baton Rouge, La.	4	13	12	0.8	4.0
5. Yonkers, N. Y.	3	1	3	0.8	2.5
6. Madison, Wis.	3	3	4	0.8	4.1
7. Berkeley, Calif.	3	7	7	0.9	3.8
8. Trenton, N. J.	5	5	6	1.0	5.9
9. Roanoke, Va.	3	3	3	1.0	4.5
10. South Bend, Ind.	5	3	3	1.1	5.7
11. Lincoln, Neb.	4	1	2	1.2	5.0
12. Austin, Tex.	6	12	4	1.2	5.5
13. Fresno, Calif.	7	10	7	1.3	8.5
14. Pasadena, Calif.	6	9	9	1.3	7.9
15. Erie, Pa.	6	4	5	1.4	6.6
16. Canton, Ohio	6	2	6	1.4	7.3
17. Hartford, Conn.	6	4	1	1.5	4.8
18. Springfield, Mass.	6	5	11	1.5	5.4
19. Gary, Ind.	7	12	9	1.5	5.9
20. Elizabeth, N. J.	4	4	7	1.5	5.1
21. Dearborn, Mich.	8	7	21	1.6	9.3
22. Niagara Falls, N. Y.	4	3	5	1.6	5.8
23. Glendale, Calif.	6	9	4	1.6	7.9
24. Evansville, Ind.	7	10	4	1.6	6.2
25. Utica, N. Y.	4	4	3	1.7	5.8
26. Reading, Pa.	5	4	7	1.7	6.6
27. Arlington, Va.	7	7	3	1.7	6.6
28. Montgomery, Ala.	6	5	2	1.7	7.7
29. Tacoma, Wash.	10	5	10	1.7	9.5
30. Des Moines, Iowa	11	11	11	1.7	9.0
31. Spokane, Wash.	11	8	10	1.7	8.8
32. Rockford, Ill.	8	3	3	1.8	10.0
33. Youngstown, Ohio	8	11	10	1.8	6.5
34. Sacramento, Calif.	14	16	10	1.9	13.4
35. Corpus Christi, Tex.	9	4	12	1.9	9.3
36. Savannah, Ga.	7	7	4	1.9	8.0
37. Salt Lake City, Utah	17	8	13	2.0	13.3
38. Little Rock, Ark.	7	7	6	2.0	9.8
All cities in this group				2.0	9.6
39. Amarillo, Tex.	8	6	2	2.1	12.0
40. Albuquerque, N. M.	13	19	11	2.3	11.5
41. Peoria, Ill.	10	2	5	2.3	13.2
42. Hammond, Ind.	6	11	10	2.4	8.2
43. Bridgeport, Conn.	10	7	3	2.4	8.9
44. New Haven, Conn.	9	5	4	2.5	8.1
45. Kansas City, Kan.	12	10	4	2.5	13.9
46. Fort Wayne, Ind.	14	10	5	2.6	13.7
47. Chattanooga, Tenn.	11	16	15	2.6	12.6
48. Duluth, Minn.	8	7	13	2.8	11.4
49. San Jose, Calif.	20	16	12	2.8	18.9
50. Nashville, Tenn.	16	11	15	2.8	13.8
51. Allentown, Pa.	9	6	5	2.8	12.1
52. Waterbury, Conn.	8	2	3	3.1	10.6
53. Shreveport, La.	16	9	6	3.1	14.9
54. Waco, Tex.	10	8	3	3.2	14.8
55. Lubbock, Tex.	12	13	5	3.2	17.1
56. Newport News, Va.	7	2	11	3.3	10.0
57. St. Petersburg, Fla.	26	20	11	3.7	29.4
58. Jackson, Miss.	14	8	5	3.7	17.8
59. Charlotte, N. C.	24	14	11	4.7	23.1
60. Mobile, Ala.	22	18	14	4.7	19.0
Group VII (50,000 to 100,000)					
1. Topeka, Kan.	0	8	7	0.0	0.0
2. Schenectady, N. Y.	0	1	4	0.0	0.0
3. Colorado Spgs., Colo.	0	1	3	0.0	0.0
4. Lexington, Ky.	0	5	3	0.0	0.0
5. San Mateo, Calif.	0	1	3	0.0	0.0
6. White Plains, N. Y.	0	2	1	0.0	0.0
7. Elmira, N. Y.	0	1	0	0.0	0.0
8. Medford, Mass.	0	1	1	0.0	0.0
9. Passaic, N. J.	0	2	2	0.0	0.0
10. Cedar Rapids, Iowa	1	0	3	0.4	1.9
11. Joliet, Ill.	1	3	4	0.4	2.5
12. Santa Monica, Calif.	1	5	7	0.5	2.0
13. Bethlehem, Pa.	1	1	0	0.5	2.0
14. Mansfield, Ohio	1	1	2	0.5	2.9
15. Mount Vernon, N. Y.	1	3	1	0.5	2.0
16. East Orange, N. J.	1	1	3	0.5	1.7
17. Portsmouth, Va.	1	4	2	0.6	1.8
18. Pueblo, Colo.	2	10	2	0.7	3.6
19. Council Bluffs, Iowa	1	3	4	0.7	2.8
20. Irvington, N. J.	1	0	0	0.7	2.4
21. Alexandria, Va.	2	5	3	0.7	3.4
22. Columbus, Ga.	2	7	4	0.8	3.4
23. Binghamton, N. Y.	2	1	2	0.8	3.6
24. Meriden, Conn.	1	3	1	0.8	2.9
25. West Hartford, Conn.	1	3	0	0.8	2.6
26. West Allis, Wis.	1	1	4	0.9	2.4
27. Woonsocket, R. I.	1	2	0	0.9	3.0
28. San Leandro, Calif.	2	1	4	0.9	4.7
29. Torrance, Calif.	3	8	4	0.9	4.6
30. Johnstown, Pa.	2	4	2	0.9	4.7
31. Kenosha, Wis.	2	7	1	1.0	4.6
32. Sioux Falls, S. D.	2	4	1	1.0	5.0
33. Orlando, Fla.	5	6	0	1.0	8.4
34. Winston-Salem, N. C.	3	4	6	1.0	5.0
35. East St. Louis, Ill.	3	7	8	1.0	4.9
36. Lake Charles, La.	2	3	5	1.0	5.4
37. Evanston, Ill.	2	0	0	1.0	3.9
38. Anderson, Ind.	2	1	1	1.0	5.9
39. St. Clair Shores, Mich.	2	3	2	1.0	4.8
40. Decatur, Ill.	3	8	6	1.0	5.7
41. Portland, Maine	2	1	5	1.1	3.7
42. Cambridge, Mass.	2	2	6	1.1	3.0
43. Pawtucket, R. I.	2	3	1	1.1	3.5
44. Springfield, Ohio	3	6	3	1.1	5.1
45. Lakewood, Calif.	2	5	3	1.1	4.2
46. New Rochelle, N. Y.	2	1	2	1.2	4.0
47. Abilene, Tex.	3	5	2	1.2	7.4
48. Hayward, Calif.	3	5	6	1.2	8.2
49. Newton, Mass.	3	5	2	1.2	5.2
50. Pensacola, Fla.	3	4	2	1.2	8.8
51. Muncie, Ind.	3	5	2	1.2	6.9
52. Lakewood, Ohio	2	3	4	1.2	4.3
53. Fort Smith, Ark.	2	7	6	1.3	5.0
54. Wheeling, W. Va.	2	1	6	1.3	5.1
55. Oak Park, Ill.	2	0	1	1.3	4.9
56. Fullerton, Calif.	2	1	0	1.3	5.9
57. Richmond, Calif.	3	5	4	1.3	4.5
58. Reno, Nev.	3	2	3	1.4	8.6
59. Jackson, Mich.	3	4	0	1.4	7.3
60. Euclid, Ohio	2	1	3	1.4	4.8
61. Lynchburg, Va.	2	3	5	1.4	5.6
62. Muskegon, Mich.	3	2	2	1.5	7.8
63. Lwr. Merion Twp., Pa.	2	2	1	1.5	5.2
64. Aurora, Ill.	3	1	1	1.5	7.8
65. Beaumont, Tex.	5	14	5	1.5	8.0
66. Pittsfield, Mass.	2	2	3	1.5	5.4
67. Bloomfield, N. J.	2	0	0	1.5	6.0
68. Columbia, S. C.	5	4	1	1.5	7.8
69. Lorain, Ohio	3	1	4	1.6	7.4
70. Hamilton, Ohio	4	3	3	1.6	8.3
71. Royal Oak, Mich.	4	10	1	1.6	8.4
72. Springfield, Ill.	5	3	4	1.6	9.2
73. Terre Haute, Ind.	4	0	4	1.7	8.2
74. Alameda, Calif.	3	3	1	1.7	6.2
75. Augusta, Ga.	4	4	3	1.7	8.1
76. Wilkes-Barre, Pa.	4	2	4	1.7	7.8
77. Davenport, Iowa	4	5	2	1.7	7.4
78. Sioux City, Iowa	4	13	5	1.7	6.8
All cities in this group				1.7	8.0
79. Santa Ana, Calif.	6	6	0	1.8	13.0
80. Hampton, Va.	3	5	13	1.8	5.6
81. Waterloo, Iowa	4	2	5	1.8	8.6
82. Warren, Ohio	4	5	2	1.8	9.5
83. Bay City, Mich.	4	3	1	2.0	9.9
84. St. Joseph, Mo.	4	2	2	2.0	7.6
85. Fort Lauderdale, Fla.	7	2	4	2.0	16.7
86. Asheville, N. C.	4	2	2	2.0	11.3
87. Pontiac, Mich.	6	3	13	2.0	10.8
88. Stamford, Conn.	5	2	3	2.0	8.6
89. Charleston, W. Va.	4	9	2	2.0	8.2
90. Battle Creek, Mich.	4	2	0	2.1	10.9
91. Dubuque, Iowa	3	0	0	2.1	8.8
92. Tuscaloosa, Ala.	3	6	2	2.1	7.9
93. Burbank, Calif.	7	7	4	2.2	11.5
94. Lancaster, Pa.	5	2	2	2.2	11.1
95. Greensboro, N. C.	6	6	11	2.3	11.1
96. Cuyahoga Falls, Ohio	3	0	2	2.3	8.9
97. Kalamazoo, Mich.	6	2	4	2.3	12.0
98. Parma, Ohio	3	0	1	2.3	6.1
99. San Bernardino, Calif.	9	13	13	2.3	16.2
100. Miami Beach, Fla.	5	6	5	2.4	14.7
101. Stockton, Calif.	9	9	8	2.4	17.7
102. Racine, Wis.	6	0	1	2.4	11.0
103. Waukegan, Ill.	4	1	2	2.4	11.9
104. Waltham, Mass.	3	2	2	2.4	9.0
105. Gadsden, Ala.	3	3	3	2.4	7.0
106. Huntington, W. Va.	6	5	4	2.5	10.4
107. Durham, N. C.	6	8	4	2.6	12.6
108. W. Palm Beach, Fla.	7	3	3	2.6	20.6
109. Ann Arbor, Mich.	5	1	2	2.6	13.8
110. Riverside, Calif.	8	7	4	2.7	15.9
111. Warren, Mich.	6	8	5	2.7	14.2
112. Bayonne, N. J.	4	1	2	2.7	7.8

	Eight Months 1960	1959	1958	1960 Reg. Rate	1960 Pop. Rate
113. Wichita Falls, Tex.	7	5	4	2.7	11.6
114. Springfield, Mo.	8	3	3	2.8	15.0
115. Manchester, N. H.	6	5	2	3.0	10.3
116. Compton, Calif.	7	7	9	3.0	16.5
117. Lincoln Park, Mich.	4	2	2	3.0	11.1
118. Atlantic City, N. J.	4	4	6	3.4	9.7
119. Anaheim, Calif.	**11**	**15**	**1**	**3.4**	**21.0**
120. New Britain, Conn.	6	3	5	3.4	10.3
121. Raleigh, N. C.	8	3	4	3.5	16.9
122. East Chicago, Ind.	4	1	3	3.5	10.1
123. Tucson, Ariz.	13	10	5	3.5	27.9
124. Brookline, Mass.	4	2	4	3.5	10.5
125. Greenville, S. C.	8	2	2	3.6	18.6
126. Covington, Ky.	6	2	2	3.7	12.3
127. Brockton, Mass.	**6**	**7**	**5**	**3.8**	**14.4**
128. Greenwich, Conn.	4	4	1	3.9	11.7
129. Santa Barbara, Calif.	10	4	5	4.0	26.9
130. Ogden, Utah	10	2	5	4.0	23.0
131. Charleston, S. C.	6	0	4	4.4	12.8
132. Norwalk, Conn.	6	4	3	4.5	14.7
133. Las Vegas, Nev.	13	4	2	4.8	36.8

Group VIII (25,000 to 50,000)

1. Whittier, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
2. Plainfield, N. J.	0	0	2	0.0	0.0
3. Appleton, Wis.	**0**	**3**	**0**	**0.0**	**0.0**
4. Hutchinson, Kan.	**0**	**1**	**1**	**0.0**	**0.0**
5. Salina, Kan.	**0**	**2**	**1**	**0.0**	**0.0**
6. University City, Mo.	**0**	**1**	**1**	**0.0**	**0.0**
7. Highland Park, Mich.	**0**	**5**	**3**	**0.0**	**0.0**
8. Eau Claire, Wis.	**0**	**2**	**2**	**0.0**	**0.0**
9. Stratford, Conn.	**0**	**2**	**2**	**0.0**	**0.0**
10. Marion, Ohio	**0**	**2**	**3**	**0.0**	**0.0**
11. Portsmouth, Ohio	0	0	2	0.0	0.0
12. Montebello, Calif.	0	0	2	0.0	0.0
13. Granite City, Ill.	**0**	**2**	**1**	**0.0**	**0.0**
14. Chicopee, Mass.	**0**	**4**	**1**	**0.0**	**0.0**
15. Wausau, Wis.	**0**	**2**	**1**	**0.0**	**0.0**
16. Ferndale, Mich.	**0**	**1**	**2**	**0.0**	**0.0**
17. Sandusky, Ohio	**0**	**2**	**4**	**0.0**	**0.0**
18. Mountain View, Calif.	**0**	**2**	**3**	**0.0**	**0.0**
19. Manhattan Bch., Calif.	0	0	0	0.0	0.0
20. Monrovia, Calif.	**0**	**3**	**0**	**0.0**	**0.0**
21. Findlay, Ohio	**0**	**3**	**2**	**0.0**	**0.0**
22. Fair Lawn, N. J.	0	0	2	0.0	0.0
23. Rock Hill, S. C.	**0**	**3**	**2**	**0.0**	**0.0**
24. Fond du Lac, Wis.	**0**	**1**	**2**	**0.0**	**0.0**
25. Park Ridge, Ill.	0	0	1	0.0	0.0
26. Columbia, Mo.	**0**	**2**	**0**	**0.0**	**0.0**
27. Steubenville, Ohio	**0**	**2**	**2**	**0.0**	**0.0**
28. Oak Park, Mich.	0	0	0	0.0	0.0
29. Lockport, N. Y.	0	0	2	0.0	0.0
30. Walla Walla, Wash.	0	0	2	0.0	0.0
31. Birmingham, Mich.	0	0	0	0.0	0.0
32. Mt. Clemens, Mich.	0	0	2	0.0	0.0
33. Redlands, Calif.	**0**	**1**	**2**	**0.0**	**0.0**
34. Provo, Utah	**0**	**1**	**2**	**0.0**	**0.0**
35. Norman, Okla.	**0**	**2**	**1**	**0.0**	**0.0**
36. Middletown, Conn.	**0**	**2**	**3**	**0.0**	**0.0**
37. Burlington, Vt.	**0**	**2**	**0**	**0.0**	**0.0**
38. New Kensington, Pa.	**0**	**2**	**0**	**0.0**	**0.0**
39. Webster Groves, Mo.	0	0	0	0.0	0.0
40. Annapolis, Md.	**0**	**1**	**2**	**0.0**	**0.0**
41. Denton, Tex.	**0**	**3**	**0**	**0.0**	**0.0**
42. Wallingford, Conn.	**0**	**3**	**0**	**0.0**	**0.0**
43. Winona, Minn.	0	0	1	0.0	0.0
44. East Lansing, Mich.	**0**	**2**	**2**	**0.0**	**0.0**
45. Mt. Lebanon, Pa.	**0**	**1**	**1**	**0.0**	**0.0**
46. Belmont, Mass.	**0**	**1**	**0**	**0.0**	**0.0**
47. Lackawanna, N. Y.	0	0	1	0.0	0.0
48. Palo Alto, Calif.	**1**	**4**	**0**	**0.5**	**3.1**
49. Tyler, Tex.	**1**	**3**	**1**	**0.5**	**3.3**
50. Redwood City, Calif.	1	1	2	0.5	3.8
51. Vancouver, Wash.	1	0	4	0.6	3.6
52. Poughkeepsie, N. Y.	1	1	2	0.6	3.7
53. Cheyenne, Wyo.	**1**	**2**	**1**	**0.6**	**3.6**
54. Casper, Wyo.	1	1	0	0.6	4.2
55. Everett, Wash.	**1**	**4**	**0**	**0.6**	**4.3**
56. Beverly Hills, Calif.	**1**	**4**	**1**	**0.7**	**4.9**
57. Wilmington, N. C.	**1**	**4**	**2**	**0.7**	**3.3**
58. Newark, Ohio	1	0	3	0.7	3.7
59. Quincy, Ill.	**1**	**4**	**3**	**0.7**	**3.5**
60. Easton, Pa.	1	1	0	0.7	3.8
61. Zanesville, Ohio	**1**	**2**	**1**	**0.7**	**3.3**
62. Rochester, Minn.	1	0	2	0.7	4.8
63. West Covina, Calif.	1	0	3	0.8	3.2
64. Danbury, Conn.	1	0	2	0.8	3.5
65. Gainesville, Fla.	1	1	2	0.8	4.8
66. Newburgh, N. Y.	1	0	2	0.8	4.6
67. Fargo, N. D.	1	0	2	0.8	3.6
68. Alton, Ill.	**1**	**4**	**4**	**0.9**	**4.6**
69. Rome, N. Y.	1	1	0	0.9	3.1
70. Bloomington, Ind.	**1**	**3**	**0**	**0.9**	**5.0**
71. Barberton, Ohio	1	0	6	0.9	4.2
72. Galesburg, Ill.	**1**	**4**	**2**	**0.9**	**4.5**
73. Torrington, Conn.	1	1	0	0.9	4.9
74. Rome, Ga.	1	1	2	0.9	4.7
75. West Orange, N. J.	**1**	**3**	**3**	**0.9**	**4.4**
76. Jackson, Tenn.	1	0	1	0.9	4.5
77. South Euclid, Ohio	**1**	**2**	**0**	**1.0**	**5.4**
78. Billings, Mont.	**2**	**2**	**2**	**1.0**	**7.8**
79. Westfield, N. J.	1	0	1	1.0	5.8
80. Kingston, N. Y.	1	1	2	1.0	4.9
81. Mason City, Iowa	1	1	2	1.0	5.1
82. Midland, Tex.	2	1	3	1.0	8.2
83. Bangor, Maine	**1**	**2**	**1**	**1.0**	**3.8**
84. Allen Park, Mich.	**1**	**2**	**1**	**1.0**	**3.3**
85. Hackensack, N. J.	**1**	**2**	**2**	**1.0**	**4.7**
86. Kearny, N. J.	**1**	**2**	**1**	**1.1**	**3.7**
87. Richfield, Minn.	1	1	1	1.1	4.2
88. Yakima, Wash.	2	1	1	1.1	10.7
89. Teaneck, N. J.	1	1	3	1.1	3.9
90. Vallejo, Calif.	**2**	**6**	**1**	**1.1**	**6.8**
91. Benton Harbor, Mich.	1	1	2	1.1	5.9
92. Montclair, N. J.	1	1	1	1.1	3.3
93. Great Falls, Mont.	2	2	3	1.2	6.4
94. Brownsville, Tex.	1	1	4	1.2	4.0
95. Modesto, Calif.	2	0	5	1.2	8.9
96. Watertown, Mass.	1	0	0	1.2	3.9
97. Burlington, N. C.	1	0	1	1.2	6.0
98. Clearwater, Fla.	**2**	**3**	**4**	**1.2**	**10.3**
99. Kokomo, Ind.	**2**	**5**	**3**	**1.2**	**6.6**
100. Hamden, Conn.	**1**	**3**	**2**	**1.3**	**3.9**
101. Grand Forks, N. D.	1	0	0	1.3	5.3
102. Lewiston, Maine	1	1	0	1.3	3.7
103. Fairmont, W. Va.	1	0	0	1.3	5.1
104. Shaker Heights, Ohio	1	0	5	1.3	4.5
105. Urbana, Ill.	1	0	0	1.4	5.7
106. Warwick, R. I.	**2**	**4**	**5**	**1.4**	**7.0**
107. Rapid City, S. D.	**2**	**4**	**2**	**1.4**	**7.5**
108. Elyria, Ohio	2	0	0	1.4	7.9
109. Rock Island, Ill.	**2**	**4**	**2**	**1.5**	**6.1**
110. Richmond, Ind.	2	1	1	1.5	6.9
111. Moline, Ill.	**2**	**4**	**6**	**1.5**	**7.7**
112. Pocatello, Idaho	**2**	**3**	**7**	**1.5**	**11.1**
113. Oshkosh, Wis.	2	1	1	1.6	6.8
114. St. Louis Pk., Minn.	2	1	0	1.6	7.8
115. Bellingham, Wash.	2	0	2	1.6	8.2
116. Danville, Va.	2	1	5	1.6	6.0
117. Coral Gables, Fla.	2	2	5	1.7	10.3
118. Arlington, Mass.	2	1	0	1.7	6.4
119. Wyandotte, Mich.	3	0	1	1.7	9.1
120. Beloit, Wis.	2	0	1	1.7	9.4
121. Des Plaines, Ill.	2	0	2	1.7	9.8
All cities in this group				1.7	7.6
122. East Hartford, Conn.	**2**	**3**	**4**	**1.8**	**8.0**
123. Boise, Idaho	3	0	0	1.8	13.1
124. Linden, N. J.	2	1	4	1.8	8.2
125. Roseville, Mich.	**2**	**5**	**2**	**1.8**	**7.2**
126. Manchester, Conn.	2	0	2	1.8	7.5
127. Groton, Conn.	1	1	1	1.8	5.5
128. Fairfield, Conn.	**2**	**7**	**4**	**1.9**	**7.3**
129. Bloomington, Ill.	2	0	1	1.9	8.3
130. Burlington, Iowa	2	0	2	1.9	9.8
131. Elkhart, Ind.	3	0	1	2.0	11.6
132. Fitchburg, Mass.	**2**	**3**	**0**	**2.1**	**7.0**
133. Odessa, Tex.	4	3	1	2.1	13.5
134. Spartanburg, S. C.	**3**	**5**	**2**	**2.1**	**10.8**
135. Owensboro, Ky.	3	1	1	2.1	10.4
136. Manitowoc, Wis.	2	0	3	2.1	10.0
137. St. Cloud, Minn.	2	2	2	2.1	9.3
138. Hamtramck, Mich.	2	0	2	2.1	6.5
139. Florence, S. C.	**2**	**3**	**1**	**2.2**	**10.5**
140. Tallahassee, Fla.	4	0	4	2.2	15.7
141. La Crosse, Wis.	3	2	2	2.2	9.4
142. Bristol, Conn.	2	0	1	2.2	6.6
143. Hagerstown, Md.	3	2	1	2.2	11.7
144. Enid, Okla.	3	2	1	2.2	12.1
145. Pine Bluff, Ark.	3	1	1	2.2	11.3
146. Rahway, N. J.	2	1	1	2.2	11.2
147. Aurora, Colo.	3	0	1	2.3	18.0
148. Champaign, Ill.	3	1	2	2.3	9.3
149. Sumter, S. C.	2	2	2	2.3	11.9
150. Freeport, Ill.	2	1	1	2.4	11.7
151. Sheboygan, Wis.	3	0	0	2.4	9.5
152. East Detroit, Mich.	3	1	0	2.5	10.5
153. Ventura, Calif.	3	3	2	2.6	17.4
154. Wyoming, Mich.	**3**	**5**	**2**	**2.6**	**10.5**
155. East Cleveland, Ohio	3	1	1	2.7	11.1
156. Janesville, Wis.	3	2	2	2.8	14.1
157. Hazel Park, Mich.	2	0	2	2.8	11.3
158. Daytona Beach, Fla.	4	3	3	2.9	16.6
159. Oxnard, Calif.	4	3	2	3.0	17.5
160. Wauwatosa, Wis.	4	1	2	3.1	13.0
161. Muskogee, Okla.	4	4	2	3.2	16.1
162. Petersburg, Va.	3	0	1	3.2	12.7
163. Watertown, N. Y.	3	1	1	3.3	12.6
164. Iowa City, Iowa	3	1	0	3.4	16.5
165. New London, Conn.	3	2	3	3.4	14.4
166. Middletown, Ohio	5	3	4	3.5	16.9
167. West Haven, Conn.	4	1	1	3.6	16.1
168. Michigan City, Ind.	4	0	4	3.6	18.1
169. Concord, N. H.	3	2	1	3.6	15.1
170. Lawton, Okla.	5	4	2	3.7	19.3
171. Port Huron, Mich.	5	3	2	3.7	19.5
172. Norwich, Conn.	4	1	0	3.7	15.4
173. Livonia, Mich.	6	1	1	3.7	18.4
174. Elgin, Ill.	6	2	4	3.8	18.7
175. National City, Calif.	4	2	1	4.1	18.9
176. High Point, N. C.	6	1	3	4.2	20.5
177. Santa Clara, Calif.	6	3	3	4.2	20.8
178. Chula Vista, Calif.	6	1	3	4.3	25.3
179. Highland Park, Ill.	3	2	1	4.3	17.9
180. Elmhurst, Ill.	5	1	1	4.3	21.6
181. Vineland, N. J.	5	3	3	4.3	22.7
182. Kettering, Ohio	4	0	0	4.6	12.4
183. Temple, Tex.	4	4	1	4.7	19.9
184. Fayetteville, N. C.	7	1	3	4.8	23.5
185. Fremont, Calif.	**3**	**4**	**3**	**4.9**	**16.8**
186. Milford, Conn.	5	0	1	5.0	19.1
187. Revere, Mass.	4	2	3	5.5	15.2
188. Monroe, Mich.	6	0	0	6.1	32.1
189. Mishawaka, Ind.	7	1	0	6.3	30.8
190. Superior, Wis.	5	2	1	6.4	21.2
191. Southfield, Mich.	7	2	4	9.8	39.3

Group IX (10,000 to 25,000)

1. Boulder, Colo.	0	0	0	0.0	0.0
2. Greeley, Colo.	**0**	**1**	**0**	**0.0**	**0.0**
3. Ft. Pierce, Fla.	**0**	**7**	**2**	**0.0**	**0.0**
4. Medford, Ore.	**0**	**1**	**0**	**0.0**	**0.0**
5. Orange, Calif.	**0**	**1**	**2**	**0.0**	**0.0**
6. Merced, Calif.	**0**	**2**	**2**	**0.0**	**0.0**
7. Los Angeles, Calif.	**0**	**2**	**0**	**0.0**	**0.0**
8. Edina, Minn.	0	0	0	0.0	0.0
9. Longview, Wash.	**0**	**1**	**2**	**0.0**	**0.0**
10. Bartlesville, Okla.	0	0	2	0.0	0.0
11. Lake Worth, Fla.	**0**	**1**	**1**	**0.0**	**0.0**
12. Sherman, Tex.	**0**	**1**	**0**	**0.0**	**0.0**
13. Butler, Pa.	0	0	1	0.0	0.0
14. Endicott, N. Y.	0	0	1	0.0	0.0
15. Ypsilanti, Mich.	0	0	1	0.0	0.0
16. Ames, Iowa	0	0	1	0.0	0.0
17. Frederick, Md.	0	0	0	0.0	0.0
18. El Cerrito, Calif.	0	0	1	0.0	0.0
19. San Fernando, Calif.	**0**	**2**	**0**	**0.0**	**0.0**
20. Covina, Calif.	0	0	1	0.0	0.0
21. Great Bend, Kan.	0	0	1	0.0	0.0
22. Lombard, Ill.	0	0	0	0.0	0.0
23. Tiffin, Ohio	0	0	0	0.0	0.0
24. Wilmette, Ill.	0	0	2	0.0	0.0
25. North Platte, Neb.	0	0	0	0.0	0.0
26. Fremont, Ohio	**0**	**1**	**0**	**0.0**	**0.0**
27. Plainview, Tex.	**0**	**2**	**0**	**0.0**	**0.0**
28. Salisbury, N. C.	**0**	**1**	**1**	**0.0**	**0.0**
29. Pittsburg, Kan.	**0**	**1**	**0**	**0.0**	**0.0**
30. Muscatine, Iowa	0	0	0	0.0	0.0
31. Traverse City, Mich.	0	0	0	0.0	0.0
32. Westport, Conn.	**0**	**3**	**2**	**0.0**	**0.0**
33. Glendora, Calif.	**0**	**3**	**0**	**0.0**	**0.0**
34. Muskegon Hts., Mich.	**0**	**2**	**0**	**0.0**	**0.0**
35. Floral Park, N. Y.	0	0	0	0.0	0.0
36. So. St. Paul, Minn.	0	0	1	0.0	0.0
37. Hibbing, Minn.	0	0	0	0.0	0.0
38. Richland, Wash.	0	0	1	0.0	0.0
39. Emporia, Kan.	0	0	0	0.0	0.0
40. Niles, Mich.	**0**	**1**	**0**	**0.0**	**0.0**
41. Marietta, Ohio	**0**	**1**	**1**	**0.0**	**0.0**
42. Albert Lea, Minn.	**0**	**1**	**0**	**0.0**	**0.0**
43. Calumet City, Ill.	**0**	**5**	**4**	**0.0**	**0.0**
44. Wooster, Ohio	**0**	**3**	**1**	**0.0**	**0.0**
45. Johnson City, N. Y.	0	0	0	0.0	0.0
46. Moorhead, Minn.	**0**	**1**	**2**	**0.0**	**0.0**
47. Streator, Ill.	0	0	0	0.0	0.0
48. Huntington, Ind.	0	0	2	0.0	0.0
49. Las Cruces, N. M.	0	0	2	0.0	0.0
50. Shorewood, Wis.	0	0	2	0.0	0.0
51. Pittsburg, Calif.	0	0	0	0.0	0.0
52. Ashland, Ohio	0	0	1	0.0	0.0
53. Kennewick, Wash.	**0**	**4**	**0**	**0.0**	**0.0**
54. So. Milwaukee, Wis.	**0**	**1**	**0**	**0.0**	**0.0**
55. Statesville, N. C.	0	0	3	0.0	0.0
56. Tempe, Ariz.	**0**	**2**	**0**	**0.0**	**0.0**
57. Valparaiso, Ind.	0	0	1	0.0	0.0
58. El Dorado, Kan.	**0**	**1**	**0**	**0.0**	**0.0**
59. Brainerd, Minn.	**0**	**1**	**0**	**0.0**	**0.0**
60. Arkansas City, Kan.	**0**	**1**	**0**	**0.0**	**0.0**
61. Pendleton, Ore.	**0**	**2**	**0**	**0.0**	**0.0**
62. Escondido, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
63. Pasco, Wash.	**0**	**1**	**1**	**0.0**	**0.0**
64. Redding, Calif.	0	0	1	0.0	0.0
65. Takoma Park, Md.	**0**	**1**	**0**	**0.0**	**0.0**
66. McAlester, Okla.	**0**	**1**	**0**	**0.0**	**0.0**
67. Alpena, Mich.	**0**	**2**	**0**	**0.0**	**0.0**
68. Massena, N. Y.	**0**	**1**	**2**	**0.0**	**0.0**
69. Brookfield, Ill.	0	0	0	0.0	0.0
70. Tracy, Calif.	0	0	0	0.0	0.0
71. Owatonna, Minn.	0	0	0	0.0	0.0
72. Prescott, Ariz.	0	0	1	0.0	0.0
73. Wisconsin Rpds., Wis.	0	0	0	0.0	0.0
74. Faribault, Minn.	**0**	**1**	**1**	**0.0**	**0.0**
75. Glenview, Ill.	0	0	1	0.0	0.0
76. Vernon, Conn.	0	0	0	0.0	0.0
77. Boone, Iowa	**0**	**1**	**0**	**0.0**	**0.0**
78. Fergus Falls, Minn.	0	0	0	0.0	0.0
79. Astoria, Ore.	0	0	0	0.0	0.0
80. Winfield, Kan.	0	0	0	0.0	0.0
81. Branford, Conn.	**0**	**1**	**0**	**0.0**	**0.0**
82. Kenmore, N. Y.	0	0	0	0.0	0.0
83. State College, Pa.	0	0	0	0.0	0.0
84. Mamaroneck, N. Y.	**0**	**2**	**0**	**0.0**	**0.0**

	Eight Months 1960	1959	1958	1960 Reg. Rate	1960 Pop. Rate
85. Waynesboro, Va.	0	0	0	0.0	0.0
86. Hawthorne, N. J.	0	0	0	0.0	0.0
87. Albany, Calif.	**0**	**1**	**1**	**0.0**	**0.0**
88. Lamesa, Tex.	**0**	**1**	**0**	**0.0**	**0.0**
89. Enfield, Conn.	0	0	0	0.0	0.0
90. Canton, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
91. Mitchell, S. D.	0	0	0	0.0	0.0
92. Beaver Dam, Wis.	0	0	0	0.0	0.0
93. Hopewell, Va.	**0**	**1**	**0**	**0.0**	**0.0**
94. Conneaut, Ohio	**0**	**1**	**0**	**0.0**	**0.0**
95. Galion, Ohio	0	0	0	0.0	0.0
96. Winnetka, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
97. Menasha, Wis.	0	0	0	0.0	0.0
98. Mt. Pleasant, Mich.	0	0	1	0.0	0.0
99. Seaside, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
100. Van Wert, Ohio	0	0	0	0.0	0.0
101. Bellefontaine, Ohio	0	0	0	0.0	0.0
102. Bowling Green, Ohio	**0**	**1**	**1**	**0.0**	**0.0**
103. Northbrook, Ill.	0	0	0	0.0	0.0
104. Hornell, N. Y.	0	0	0	0.0	0.0
105. Virginia, Minn.	0	0	0	0.0	0.0
106. Grosse Pt. Wds., Mich.	0	0	0	0.0	0.0
107. Du Bois, Pa.	**0**	**1**	**0**	**0.0**	**0.0**
108. Bay Village, Ohio	0	0	1	0.0	0.0
109. Cudahy, Wis.	0	0	0	0.0	0.0
110. Pacific Grove, Calif.	0	0	0	0.0	0.0
111. Cadillac, Mich.	0	0	0	0.0	0.0
112. University Hgts., Ohio	**0**	**1**	**0**	**0.0**	**0.0**
113. Charles City, Iowa	0	0	0	0.0	0.0
114. La Grange Park, Ill.	0	0	0	0.0	0.0
115. Fairfield, Calif.	0	0	0	0.0	0.0
116. Menominee, Mich.	0	0	1	0.0	0.0
117. Grosse Pte. Pk., Mich.	0	0	0	0.0	0.0
118. Glastonbury, Conn.	0	0	0	0.0	0.0
119. Covington, Va.	0	0	0	0.0	0.0
120. Ironwood, Mich.	0	0	0	0.0	0.0
121. Los Alamos, N. M.	**0**	**2**	**0**	**0.0**	**0.0**
122. Moscow, Idaho	0	0	0	0.0	0.0
123. Mansfield, Conn.	**0**	**1**	**0**	**0.0**	**0.0**
124. Bellaire, Ohio	**0**	**0**	**1**	**0.0**	**0.0**
125. Stonington, Conn.	**0**	**1**	**0**	**0.0**	**0.0**
126. Webster, Mass.	0	0	0	0.0	0.0
127. Fairfield, Ala.	0	0	0	0.0	0.0
128. Watertown, Conn.	**0**	**1**	**0**	**0.0**	**0.0**
129. Killingly, Conn.	**0**	**2**	**0**	**0.0**	**0.0**
130. Mercedes, Tex.	0	0	0	0.0	0.0
131. Donora, Pa.	0	0	0	0.0	0.0
132. Englewood, Colo.	1	0	1	0.8	6.6
133. Grand Island, Neb.	1	1	2	1.0	6.0
134. Fort Myers, Fla.	1	1	0	1.0	8.5
135. Austin, Minn.	1	0	0	1.0	6.1
136. Lawrence, Kan.	1	0	1	1.1	5.4
137. Lodi, Calif.	1	0	2	1.2	7.5
138. Waukesha, Wis.	**1**	**3**	**0**	**1.1**	**6.2**
139. Port Chester, N. Y.	1	0	1	1.1	8.1
140. Big Spring, Tex.	**1**	**3**	**4**	**1.1**	**7.2**
141. Carlsbad, N. M.	1	1	2	1.2	7.6
142. Pampa, Tex.	1	0	1	1.2	7.9
143. Napa, Calif.	1	0	1	1.3	9.6
144. North Miami, Fla.	1	1	0	1.3	6.4
145. Lufkin, Tex.	1	1	2	1.3	8.6
146. Corvallis, Ore.	1	0	1	1.4	8.1
147. Manhattan, Kan.	1	0	0	1.4	7.9
148. Wheaton, Ill.	1	0	1	1.4	6.4
149. Renton, Wash.	1	1	1	1.4	8.9
150. Uniontown, Pa.	1	0	1	1.4	7.1
151. Ottawa, Ill.	**1**	**2**	**2**	**1.4**	**7.7**
152. Jeffersonville, Ind.	1	1	1	1.4	7.5
153. Madison Hts., Mich.	**1**	**2**	**0**	**1.4**	**7.0**
154. Aberdeen, S. D.	1	1	2	1.4	6.8
155. Denison, Tex.	**1**	**2**	**2**	**1.4**	**7.2**
156. Owosso, Mich.	1	0	0	1.4	7.5
157. Sedalia, Mo.	**1**	**3**	**0**	**1.4**	**7.1**
158. Morristown, N. J.	1	0	0	1.4	8.5
159. Cranford, N. J.	1	1	0	1.4	6.6
160. Brownwood, Tex.	**1**	**3**	**0**	**1.5**	**7.4**
161. Ada, Okla.	1	0	0	1.5	9.4
162. Texarkana, Ark.	1	1	2	1.5	7.6
163. Cape Girardeau, Mo.	1	1	0	1.5	6.8
164. So. Portland, Maine	1	0	2	1.5	6.2
165. Oceanside, Calif.	**1**	**2**	**4**	**1.5**	**7.3**
166. Meadville, Pa.	1	0	0	1.5	7.9
167. Coffeyville, Kan.	1	0	2	1.5	8.6
168. Hollywood, Fla.	**2**	**4**	**1**	**1.6**	**13.2**
169. Greenville, Tex.	1	1	1	1.6	9.7
170. Chico, Calif.	1	0	1	1.6	12.0
171. Fairborn, Ohio	1	0	1	1.6	8.6
172. Xenia, Ohio	1	1	2	1.6	8.9
173. Connersville, Ind.	1	1	2	1.6	8.5
174. Snyder, Tex.	1	0	0	1.6	10.1
175. Stillwater, Okla.	1	0	2	1.6	7.4
176. Martinsville, Va.	**1**	**5**	**0**	**1.6**	**7.9**
177. Elmwood Park, Ill.	1	0	0	1.6	6.5
All cities in this group				1.6	8.2
178. Caldwell, Idaho	**1**	**2**	**1**	**1.7**	**12.8**
179. New Bern, N. C.	1	1	1	1.7	8.0
180. Mt. Vernon, Ill.	1	0	1	1.7	9.6
181. Peru, Ind.	**1**	**3**	**0**	**1.7**	**9.9**
182. Santa Cruz, Calif.	2	1	3	1.8	13.2
183. Newton, Kan.	1	0	1	1.8	11.4
184. Sterling, Ill.	1	1	0	1.8	9.9
185. Greenwood, Miss.	1	1	0	1.8	7.8
186. Marquette, Mich.	1	0	0	1.8	8.0
187. Antioch, Calif.	1	0	1	1.8	9.7
188. Villa Park, Ill.	1	0	0	1.8	8.3
189. Collingswood, N. J.	1	1	1	1.8	8.3
190. Fostoria, Ohio	1	0	0	1.8	9.1
191. Stevens Point, Wis.	**1**	**2**	**0**	**1.8**	**8.6**
192. La Grange, Ill.	1	0	0	1.8	10.2
193. Vernon, Tex.	**1**	**2**	**1**	**1.9**	**11.8**
194. Attleboro, Mass.	**1**	**4**	**3**	**1.9**	**6.0**
195. Salinas, Calif.	2	0	5	1.9	14.3
196. Highland Park, Tex.	1	0	1	1.9	12.3
197. Norfolk, Neb.	1	1	0	1.9	11.8
198. De Kalb, Ill.	1	1	0	1.9	9.6
199. La Mesa, Calif.	2	1	1	1.9	12.8
200. East Moline, Ill.	**1**	**2**	**0**	**1.9**	**9.8**

TRAFFIC DEATHS—STATE RECORDS

Deaths are reported by state traffic authorities.

All figures are preliminary. To insure proper comparisons, 1959 and 1958 figures cover the same reporting period as those for 1960.

Population Rate: U. S. population rate is the estimated annual number of deaths per 100,000 population, assuming that deaths for the rest of the year will follow the normal seasonal pattern. State population rate is the estimated annual number of deaths per 100,000 population, assuming that the monthly average of deaths will remain at the present average for the rest of the year. Population rates are based on July 1, 1959, population estimates, U. S. Bureau of the Census, Washington, D. C.

States shown in heavy type have improved in 1960 compared with 1959, or showed no change.

Mileage Rate: The number of deaths per 100 million vehicle miles of travel.

(Figures in parenthesis following the 1960 mileage rate indicate the number of months for which the mileage rate is calculated for each state.)

	Months Reported	Deaths Identical Periods 1960	1959	1958	% Change 1959 to 1960	% Change 1958 to 1960	1960 Pop. Rate	1960 Mile. Rate	
TOTAL U.S.	8	24,010	23,860	22,963	+ 1%	+ 5%	21.2	5.1	(8)
Ala.	8	565	534	492	+ 6%	+ 15%	26.6	6.6	(6)
Alaska	8	21	14	18	+ 50%	+ 17%	16.5	—	—
Ariz.	8	326	351	320	— 7%	+ 2%	39.7	7.5	(7)
Ark.	8	265	301	261	— 12%	+ 2%	22.8	5.4	(7)
Calif.	8	2,346	2,251	2,241	+ 4%	+ 5%	24.0	5.2	(6)
Colo.	7	232	223	204	+ 4%	+ 14%	23.7	3.9	(4)
Conn.	8	164	151	135	+ 9%	+ 21%	10.2	2.1	(6)
Del.	8	55	51	40	+ 8%	+ 38%	18.3	3.3	(6)
D. of C.	8	54	38	37	+ 42%	+ 46%	9.6	3.5	(6)
Fla.	8	810	711	724	+ 14%	+ 12%	25.5	5.8	(6)
Ga.	8	670	653	574	+ 3%	+ 17%	26.2	5.9	(5)
Hawaii	8	69	58	—	+ 19%	—	15.8	—	—
Idaho	8	145	148	174	— 2%	— 17%	32.8	7.1	(6)
Ill.	8	1,023	1,106	1,117	— 8%	— 8%	15.0	3.8	(6)
Ind.	8	690	690	600	0%	+ 15%	22.3	4.8	(7)
Iowa	8	354	408	365	— 13%	— 3%	18.9	4.2	(6)
Kan.	8	303	388	347	— 22%	— 13%	21.3	4.7	(6)
Ky.	8	465	490	447	— 5%	— 3%	22.3	6.4	(6)
La.	8	531	529	489	+ *%	+ 9%	25.2	7.5	(7)
Maine	8	102	85	113	+ 20%	— 10%	16.1	3.4	(7)
Md.	8	347	331	327	+ 5%	+ 6%	17.2	4.9	(6)
Mass.	8	366	348	362	+ 5%	+ 1%	11.1	3.1	(6)
Mich.	8	933	854	811	+ 9%	+ 15%	17.6	4.3	(7)
Minn.	8	440	368	453	+ 20%	— 3%	19.4	4.1	(7)
Miss.	8	428	343	320	+ 25%	+ 34%	29.4	7.9	(7)
Mo.	8	640	583	579	+ 10%	+ 11%	22.6	4.9	(6)
Mont.	8	144	155	120	— 7%	+ 20%	31.4	5.3	(6)
Neb.	8	171	229	211	— 25%	— 90%	17.7	3.5	(6)
Nev.	8	106	122	83	— 13%	+ 28%	56.8	7.9	(5)
N. H.	8	59	78	59	— 24%	0%	15.0	3.6	(7)
N. J.	8	488	470	463	+ 4%	+ 5%	12.3	2.9	(7)
N. M.	8	259	288	254	— 10%	+ 2%	44.3	7.5	(6)
N. Y.	8	1,218	1,364	1,319	— 11%	— 8%	11.1	3.7	(6)
N. C.	8	722	742	629	— 3%	+ 15%	23.9	6.3	(6)
N. D.	8	102	119	96	— 14%	+ 6%	23.8	8.6	(7)
Ohio	8	1,220	1,105	1,117	+ 10%	+ 9%	18.9	4.6	(6)
Okla.	8	403	419	427	— 4%	— 6%	26.6	4.6	(5)
Ore.	8	254	308	264	— 18%	— 4%	21.6	4.7	(7)
Pa.	8	1,059	1,005	1,032	+ 5%	+ 3%	14.1	3.9	(6)
R. I.	8	36	55	47	— 35%	— 23%	6.2	1.7	(6)
S. C.	8	449	408	350	+ 10%	+ 28%	27.9	7.6	(6)
S. D.	8	135	140	161	— 4%	— 16%	29.5	4.5	(7)
Tenn.	8	506	471	462	+ 7%	+ 10%	21.7	5.1	(6)
Tex.	8	1,441	1,502	1,444	— 4%	— *%	22.7	4.5	(6)
Utah	8	162	124	128	+ 31%	+ 27%	27.6	5.1	(4)
Vt.	8	65	60	49	+ 8%	+ 33%	26.3	5.4	(7)
Va.	8	479	532	520	— 10%	— 8%	18.0	4.6	(7)
Wash.	8	357	343	337	+ 4%	+ 6%	19.0	4.3	(6)
W. Va.	8	207	265	216	— 22%	— 4%	15.8	5.4	(6)
Wis.	8	516	517	520	— *%	— 1%	19.3	4.6	(6)
Wyo.	8	106	119	94	— 11%	+ 13%	49.8	6.9	(6)
P. R.‡	8	244	168	191	+ 45%	+ 28%	15.8	15.9	(6)
V. I.†	7	5	5	3	0%	+ 67%	33.3	—	—
CANADIAN PROVINCES									
Alta.	7	162	122	157	+ 33%	+ 3%	24.0	—	—
B. C.	6	114	122	110	— 7%	+ 4%	15.3	—	—
Man.	7	58	69	59	— 16%	— 2%	11.5	—	—
Sask.	7	53	76	64	— 30%	— 17%	10.4	—	—

*Less than .5%

‡Commonwealth of Puerto Rico

†Virgin Islands

	Eight Months 1960	1959	1958	1960 Reg. Rate	1960 Pop. Rate
201. Rocky River, Ohio	1	1	0	2.0	9.6
202. Needham, Mass.	1	1	2	2.0	6.9
203. The Dalles, Ore.	1	1	0	2.0	13.3
204. Garden City, Kan.	1	0	0	2.0	13.8
205. Shelton, Conn.	1	1	5	2.0	9.0
206. Hanford, Calif.	1	0	0	2.0	15.0
207. North Adams, Mass.	**1**	**2**	**0**	**2.0**	**7.0**
208. Ponca City, Calif.	2	0	0	2.1	13.0
209. Garland, Tex.	**2**	**3**	**1**	**2.1**	**13.5**
210. Ansonia, Conn.	1	1	0	2.1	7.6
211. Lexington, N. C.	1	0	3	2.1	10.4
212 Marshfield, Wis.	1	0	4	2.1	11.0
213. Coronado, Calif.	**1**	**3**	**4**	**2.2**	**8.0**
214. St. Joseph, Mich.	1	0	0	2.2	11.5
215. Atchison, Kan.	1	1	1	2.2	11.7
216. Gardner, Mass.	1	1	2	2.2	7.5
217. La Porte, Ind.	2	1	3	2.3	13.0
218. Plymouth, Mich.	1	0	0	2.3	13.8
219. Adrian, Mich.	2	0	1	2.3	12.5
220. Central Falls, R. I.	1	0	0	2.5	6.3
221. Suffolk, Va.	1	0	0	2.5	12.1
222. Kingsport, Tenn.	2	0	0	2.6	12.2
223. Marinette, Wis.	**1**	**2**	**1**	**2.6**	**10.6**
224. Winchester, Conn.	1	1	1	2.6	12.6
225. Red Wing, Minn.	1	0	1	2.6	13.3
226. River Forest, Ill.	**1**	**2**	**0**	**2.6**	**13.9**
227. River Rouge, Mich.	**1**	**3**	**0**	**2.6**	**7.0**
228. Mesa, Ariz.	3	3	1	2.6	20.6
229. East Haven, Conn.	2	0	0	2.7	16.0
230. Rock Springs, Wyo.	1	0	0	2.7	12.9
231. Cambridge, Md.	1	0	1	2.7	14.4
232. Bemidji, Minn.	**1**	**2**	**0**	**2.7**	**15.0**
233. Henderson, N. C.	1	0	2	2.8	13.6
234. Dyersburg, Tenn.	**1**	**3**	**1**	**2.8**	**13.8**
235. Maumee, Ohio	1	0	0	2.9	14.7
236. Stoughton, Mass.	1	0	2	2.9	10.9
237. Milford, Mass.	1	1	0	2.9	9.6
238. Westlake, Ohio	1	1	1	2.9	14.0
239. Holland, Mich.	2	0	2	2.9	15.4
240. Auburn, Mass.	1	0	0	3.0	12.1
241. Ridgefield Pk., N. J.	1	0	0	3.1	10.7
242. La Salle, Ill.	1	0	0	3.1	12.4
243. Augusta, Maine	2	2	6	3.2	12.1
244. Hillside, N. J.	2	0	1	3.2	14.2
245. Beacon, N. Y.	1	0	1	3.2	10.0
246. Berkley, Mich.	2	2	0	3.2	13.0
247. Oswego, N. Y.	2	0	1	3.3	13.3
248. Woodland, Calif.	2	1	0	3.5	25.9
249. Bell, Calif.	3	1	0	3.6	24.5
250. Corona, Calif.	2	2	0	3.6	23.6
251. Niles, Ohio	**2**	**4**	**0**	**3.7**	**15.4**
252. Defiance, Ohio	2	0	0	3.7	20.8
253. Goshen, Ind.	2	1	1	3.8	22.7
254. Bristol, Va.	2	0	0	3.8	16.8
255. Livermore, Calif.	2	0	0	3.8	23.8
256. Naugatuck, Conn.	**2**	**4**	**0**	**3.8**	**15.3**
257. Wethersfield, Conn.	2	0	1	3.9	17.5
258. Westminster, Calif.	**2**	**9**	**0**	**4.0**	**18.8**
259. Sault Ste. Marie, Mich.	2	1	2	4.1	15.2
260. Logan, Utah	2	0	1	4.1	17.9
261. W. Springfield, Mass.	**3**	**4**	**3**	**4.1**	**19.7**
262. Monterey, Calif.	3	0	1	4.3	20.6
263. Escanaba, Mich.	2	0	0	4.4	19.7
264. Klamath Falls, Ore.	4	1	0	4.7	31.6
265. Albion, Mich.	2	0	0	4.7	25.0
266. Southington, Conn.	2	0	1	4.9	17.8
267. Leominster, Mass.	3	1	1	4.9	18.1
268. Ocala, Fla.	4	0	2	5.1	42.0
269. Dover, Ohio	2	1	2	5.1	27.8
270. Circleville, Ohio	2	0	0	5.2	28.6
271. Victoria, Tex.	5	0	0	5.2	33.5
272. Homewood, Ala.	2	1	1	5.3	16.7
273. Windham, Conn.	2	0	4	5.5	16.4
274. Two Rivers, Wis.	2	1	0	5.5	26.1
275. Ecorse, Mich.	2	0	0	5.6	16.2
276. Santa Paula, Calif.	3	0	1	5.7	36.9
277. Fort Thomas, Ky.	2	0	1	5.8	17.4
278. Pompano Beach, Fla.	3	0	0	5.8	37.5
279. West Lafayette, Ind.	**2**	**3**	**1**	**5.8**	**22.9**
280. Monroe, N. C.	2	2	1	5.8	28.6
281. Watertown, Wis.	3	1	1	6.2	34.6
282. Griffin, Ga.	3	0	0	6.3	32.1
283. Brawley, Calif.	3	0	2	6.6	33.6
284. Goldsboro, N. C.	5	3	2	7.1	34.9
285. Yuma, Ariz.	5	1	0	7.5	59.1
286. Windsor, Conn.	3	2	1	7.6	26.9
287. North Chicago, Ill.	3	2	3	8.5	25.0
288. Hays, Kan.	4	0	0	9.3	60.0
289. Derby, Conn.	3	0	1	9.4	40.5
290. Rolling Meadows, Ill.	2	0	0	9.6	28.6
291. Bloomington, Minn.	6	0	6	11.2	71.4
292. Reidsville, N. C.	6	0	0	15.7	76.9
293. Darien, Conn.	9	2	0	17.1	86.0
CANADIAN CITIES					
Toronto, Ont.	66	52	81	—	6.7
London, Ont.	5	5	2	—	7.4
Vancouver, B. C.	22	20	19	—	8.2
Hamilton, Ont.	15	13	13	—	9.3
Montreal, Que.	72	71	63	—	9.7

MOTOR VEHICLE DEATHS AND INJURIES BY STATES 1960 and 1959

Forty-four states and the District of Columbia have reported their death and injury experience for one to seven months of 1960.

The table below shows all of the injury data reported by each state, but little information is available on precisely what injuries are included in each state's tabulation.

Differences in the ratio of injuries to deaths probably reflect primarily differences in the extent to which all injuries are reported. Other factors are undoubtedly involved, such as: (1) a few states omit some or all of the injuries in urban accidents; (2) there are large differences between states in the proportion of travel which is in urban area (the injury-death ratio for urban accidents is about four times the ratio for rural accidents).

The question of what injuries are being reported applies with equal force to the per cent change in injuries from 1959 to 1960. Any tightening up of police administration, any emphasis on "get all the injuries" is almost certain to bring about an increase in reported injuries, but probably only in minor ones. Similarly, instructions to "skip the scratches" probably would result in a decrease in recorded cases in many states. Introduction of financial responsibility laws has been observed to increase reported injuries sharply. Even the public's increased claims-consciousness is regarded by many people as an element in the growing number of injuries reported. With such factors operating to destroy comparability, indicated changes in the number of injuries should not be considered as reliable.

Months Reported	Deaths†† 1960	1959	Injuries†† 1960	1959	% Change 1959 to 1960 Deaths	Injuries	1960 Ratio of Injuries to Deaths
TOTAL U.S. **	14,839#	14,562#	664,637	630,205	+ 2#	+ 5	45
Ala. 7	479	463	2,729†	2,627†	+ 3	+ 4	6
Ariz.							
Ark. 7	219	257	2,306	1,937	— 15	+ 19	11
Calif. 6	1,714	1,667	72,138	67,934	+ 3	+ 6	42
Colo.							
Conn. 4	64	66	6,968	6,588	— 3	+ 6	109
Del. 7	44	46	1,499	1,558	— 4	— 4	34
D. of C. 7	47	35	4,510	4,463	+ 34	+ 1	96
Fla. 6	614	532	23,100	20,722	+ 15	+ 11	38
Ga. 7	572	534	11,007	9,997	+ 7	+ 10	19
Idaho 6	105	101	2,171	2,378	+ 4	— 9	21
Ill. 6	726	774	47,354	46,492	— 6	+ 2	65
Ind. 1	80	76	2,621	2,775	+ 5	— 6	33
Iowa							
Kan. 3	87	115	3,360	3,250	— 24	+ 3	39
Ky. 7	399	427	8,514	8,789	— 7	— 3	21
La. 7	477	363	4,674†	4,743†	+ 31	— 1	10
Me. 7	81	72	3,889	3,415	+ 13	+ 14	48
Md. 6	269	250	12,262	10,004	+ 8	+ 23	46
Mass 4	147	151	32,236	28,471	— 3	+ 13	219
Mich. 6	526	575	40,990	27,700	+ 9	+ 48	65
Minn. 7	362	319	15,653	15,027	+ 13	+ 4	43
Miss. 6	308	239	3,781	3,365	+ 29	+ 12	12
Mo. 7	552	485	7,162	6,628	+ 14	+ 8	13
Mont. 3	63	75	1,446	1,065	— 16	+ 36	23
Neb. 6	112	146	5,128	4,712	— 23	+ 9	46
Nev.							
N. H. 7	50	68	3,459	3,316	— 26	+ 4	69
N. J. 4	206	207	20,743	17,889	— *	+ 16	101
N. M. 6	188	220	2,887	2,483	— 15	+ 16	15
N. Y. 6	866	955	128,858	129,586	— 9	— 1	149
N. C. 6	540	544	12,167	10,988	— 1	+ 11	23
N. D. 6	69	83	1,321	1,288	— 17	+ 3	19
Ohio 7	1,051	908	44,679	42,260	+ 16	+ 6	43
Okla. 1	41	41	1,308	1,190	0	+ 10	32
Ore. 6	168	202	7,952	9,435	— 17	— 16	47
Pa. 5	606	626	34,897	34,665	— 3	+ 1	58
R. I. 3	13	19	2,277	2,014	— 32	+ 13	175
S. C. 7	390	338	6,881	5,333	+ 15	+ 29	18
S. D. 4	43	54	957	—	— 20	—	22
Tenn. 6	356	326	9,637	7,562	+ 9	+ 27	27
Tex. 6	1,010	1,097	28,139	34,866	— 8	— 19	28
Utah 4	62	43	2,564	1,612	+ 44	+ 59	41
Vt. 7	49	53	1,545	1,747	— 8	— 12	32
Va. 5	285	303	9,728	9,493	— 6	+ 2	34
Wash. 6	238	235	13,617	13,704	+ 1	— 1	57
W. Va. 6	152	203	3,374	3,604	— 25	— 6	22
Wis. 5	284	264	11,765	11,561	+ 8	+ 2	41
Wyo. 6	68	59	1,341	969	+ 15	+ 38	20
P. R.‡ 6	187	122	6,176	5,619	+ 53	+ 10	33
V. I.¶ 7	5	5	111	95	0	+ 17	22

†Rural injuries only.

††All figures are preliminary. To insure proper comparisons, 1959 figures cover the same reporting period as those for 1960.

*Less than .5%.

**Death and injury totals cover reports for all months indicated in this column.

#Death totals and changes differ from national figures because those shown here are based on the states and months for which injury data are reported.

‡Commonwealth of Puerto Rico.

¶Virgin Islands.

Library

From Page 6

Bureau of Public Roads on freeways for the purpose of reducing tension, strain and accidents in night driving and perhaps increase night usage of these highways.)

Motor Transportation Industry

Fleet Cleanliness Pays Big Dividends. Rolland L. Jerry. *Motor Truck & Coach,* August, 1960, p. 28-39, 32-33.

(Shop program includes safety.)

Make Your Rigs Sparkle. *Commercial Car Journal,* August 1960, p. 108-110.

(Maintenance program.)

Tire Check Hazards. *Motor Truck & Coach.* July, 1960, p. 48.

(On the Fleet Safety Scene.)

Transit Fact Book. 1960 Edition, 15 pp. American Transit Association, 355 Lexington Avenue, New York 17, N. Y.

Pavement Markings

Center-Lanes versus Road Edges. (Better Roads Forum.) *Better Roads,* August, 1960, p. 25-26.

Point Systems

Driver License Point Systems. First of Two Parts. Robert L. Donigan and Edward C. Fisher. *Traffic Digest and Review,* August, 1960, p. 30-40.

Programs

AMA Grants Total $1,706,000: Aid Safety and Highway Programs. *Automotive Safety,* July, 1960, p. 4.

National Groups Act to Increase Rural Road Safety: ASF Supports Programs to Reduce Traffic Accidents. *Automobile Safety,* July, 1960, p. 1-2.

Research

Traffic Accident Study Contracted for by Bureau of Public Roads. *American Highways,* July, 1960, p. 13.

(Automotive Safety Foundation will direct a study of the effects of traffic control measures and roadway design on traffic accidents.)

Roadsides

Weed and Brush Spraying Precautions. *Roads and Streets,* August, 1960, p. 80.

Signs and Signals

Uniform Traffic Control Devices for Canada. W. Q. Macnee. *Traffic Engineering,* August, 1960, p. 18-19, 39-40.

Speed

A Study of Spot Speeds of Isolated Vehicles: Part II. Giorgio Pellegrini. *International Road Safety and Traffic Review,* Summer, 1960, Vol. VIII, No. 3, p. 34-39.

Traffic Control

Over-Controlled Traffic. Daniel J. Hanson. *Traffic Digest and Review,* August, 1960, p. 14-18.

(Excessive and unrealistic regulation of motor vehicle movements wastes money, confuses drivers, and creates serious hazards.)

Sioux City Upgrades Traffic Control. Norman C. Barnett, *Traffic Engineering,* August, 1960, p. 20-21.

Violations

Fifty-eight Violations Seen in Six Hours-40 Minutes. *Chicago Traffic Safety Review,* July, 1960, p. 1-4.

(Violation survey in Chicago found strong evidence that violators in large numbers escape arrest.)

Weather

Bad Weather Warning. Jess P. Unger. *Traffic Digest and Review,* August, 1960, p. 20-22.

(Motorists in the Washington, D. C. metropolitan area receive advance notice of hazardous rush-hour driving conditions.)

Book Review

The Police Traffic Control Function by Paul B. Weston, 1960. Charles C. Thomas, Springfield, Ill. $11.50.

Extensive experience in the police traffic control functions as well as in the educational field have amply qualified the author to write in the traffic control field which is so important these days.

This book delineates the role of the traffic engineer and the police traffic control officer. The author feels that both are not operating at full efficiency in their key roles of reducing traffic accidents.

The author does not advance any quick remedies but rather the approach based on accident investigation, accident records, traffic surveys, and research. This approach is sound and blends into a program suggested by the President's Action Program which is supported by all national organizations in the traffic accident prevention field.

The book is well written, easy to read and contains numerous illustrations. Students interested in traffic safety and policemen desiring to advance in this field should find the book a valuable aid to them.

The author is to be congratulated for his practical presentation of a complicated subject; also for not offering a panacea for solving a most difficult problem.—*Daniel G. Reynolds,* Director, Traffic Department, NSC.

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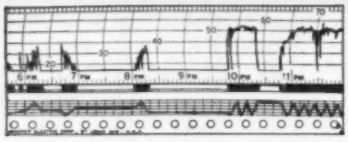

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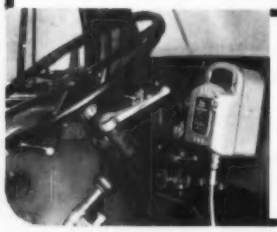

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Virginia Inspection

From Page 17

and choose the system best suited for that state. Perhaps some states may need a combination of state owned and operated stations in urban areas and state appointed stations in rural areas. Whatever system is used should be designed to provide the citizen with the best service.

Experience has proved that the main objectors to periodic inspection can be classified as follows:

1. Those who are naturally upset when they incur expensive but necessary repair bills.

2. Those who operate automobiles when they actually cannot afford to do so. Their cars are usually old and in poor condition. The owners dread the prospect of large repair bills which might force them to give up their vehicles.

3. Those who resent the inconvenience necessary to present their vehicles for inspection.

4. Those who feel that the state exercises no control over stations and thus unscrupulous repairmen have car owners at their mercy.

5. Those who feel, to varying degrees, that almost any restrictions placed on motorists are tyrannical and unfair.

6. Those who believe that very few lives are saved by inspection and that money and effort necessary to its promotion could be better used in other phases of traffic safety.

Considering the first two objections, we must realize that owning and operating a car are not only expensive undertakings but also bring with them grave responsibilities. We have our financial responsibility law which halts the driving career of one uninsured and unable otherwise to pay for damage he has caused. Of late, the matters of compulsory insurance and unsatisfied judgment funds are gaining national followings. Surely, an expense which acts to prevent trouble rather than ease the burden after it comes is as justifiable.

Our society now feels an automobile to be an absolute necessity. It is interesting to conjecture as to what comforts and pleasures are foregone by many who maintain a late model car. These feel this to be the ultimate in life, although their vehicles might be one step ahead of re-possession and their rent bills overdue.

When considering the third objection, no one will attempt to deny that the inspection program results in a certain amount of inconvenience. Much of this can be avoided if owners will take advantage of the early weeks of the periods rather than wait until the eleventh hour when stations may be jammed with late comers. The longer one waits, the more chance he runs of being denied legal use of his car for several days after the expiration of the current sticker. Let us not lose sight of the fact that the administrator of an inspection program, whether it be a state operated or state appointed system, also shoulders the responsibility of providing as convenient a manner as possible for the citizen to have his vehicle inspected.

In Virginia, we have attempted to overcome this objection by providing a year around inspection procedure which permits the citizen to have his vehicle re-inspected at any time within six months from the month of the initial inspection. Whenever a vehicle is inspected, it receives a sticker that expires six months from the month of that inspection. Thus citizens having their vehicles worked on for any other reason, even so small a function as a grease job, in an inspection station can have their vehicles inspected at that time and will not be further inconvenienced.

This system has worked very well, since the citizen has his vehicle inspected at a time of his choosing, inspection stations can regulate the flow of traffic through them, more time is provided for inspection, and a more thorough inspection is permitted. All of this aids the state's traffic safety program. Virginia's statistics over a period of years indicate that from 46 to 54 per cent of the vehicles submitted for inspection were found to be defective. Under the first year of this

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new procedure, when it was found that the citizen did not wait six months to have the vehicle inspected, the percentage of defective vehicles was reduced to 37.5 per cent. This is tangible evidence of improvement in the condition of vehicles continually operated over our highways.

The fourth objection, the claim that the state exercises no control over the appointed stations, merits considerable discussion. Both the station and its applying owners must be of excellent reputation. Participating mechanics must be certified and undergo annually a short course of instruction administered by the state. Once appointed, the stations and the inspectors must be under close and positive supervision by the state. Any complaint from the public as to discourtesy, incompetence, unfairness, or any other indication that the required standards are not being met, should be thoroughly investigated to see that the interests of the public and those of traffic safety are properly served.

The supervisor must also act in an advisory capacity to the inspection station. When it is found that the inspection station or inspecting mechanics are not strictly complying with inspection regulations, they must be disciplined. For serious infractions, they must be removed from the inspection program.

Additional control may be obtained through police road checks. Each week these road checks should be established and the registration and operator's license of each driver checked. This procedure also permits a cursory examination of the mechanical safety of a vehicle during this spot survey. In this manner an appraisal is obtained of the work done by inspection stations in a locality, and any discrepancy found between the defects and the current stickers should be thoroughly investigated and appropriate action taken.

In the fifth category are those who object to license suspension, radar, unmarked police cars, and other enforcement measures as unsporting interference with what they feel is their inherent right to operate a potentially dangerous weapon as best suits their convenience and individual tastes.

The last group includes those who point to the relatively small percentage of defective cars known to be involved in crashes, but who do not realize that the percentage could be considerably higher if nothing were done to insure mechanical safety.

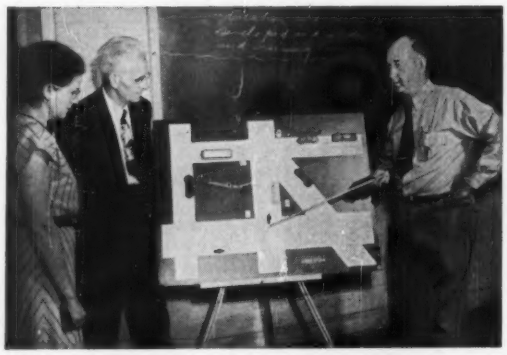
This last group also includes those who frequently ask, "How many lives can be saved or how many crashes can be prevented by motor vehicle inspection?" To answer this, we must agree that causes of motor vehicle crashes are indeed complex and that traffic safety approaches to the prevention of crashes must also be complex. Because of this, it is impossible for the engineer, legislator, operator's license examiner, driver control supervisor, educator, police officer or judge to present tangible evidence indicating that either has prevented a single crash or saved a single life. Likewise, the motor vehicle inspector cannot show where he has saved a life or prevented a crash, but from proper records he can present more tangible evidence to show vehicle improvement than can be presented in many other fields of traffic safety endeavor.

This statement should not be construed to mean that motor vehicle inspection is the most important phase of traffic safety, but simply that it should be considered on a par with the other phases. To stress this, it can be pointed out that Virginia has had a periodic inspection program since 1932, with the exception of the war years when it was not feasible to operate the program because of gasoline and tire restrictions, reduced speed limits, and a scarcity of repair parts.

Virginia's program was thus suspended in January 1944 and re-activated in July 1947. In 1946, Virginia's records indicated that 10.4 per cent of the vehicles involved in all crashes was found to be defective. After the re-activation of the program, the percentage of defective vehicles involved in crashes declined and, in 1959, only 4.6 per cent of the vehicles involved in crashes was found to be defective. This again is tangible evidence of improvement from inspection.

One smaller school of thought that

To Page 47



THE "EYES" HAVE IT . . . .

Here is an aid that has proven practical in teaching visually the principles of safety. It's simple, effective and works wonders in teaching your drivers.
The MAGNO SAF-T BOARD is the result of studies by outstanding safety instructors and engineers. Safety directors, traffic managers, driving instructors, insurance agents and adjusters get a clear picture of how accidents occurred visually by reconstruction of conditions.

It is now being used from coast to coast by fleet owners, insurance and public utility companies, colleges and schools, and many other concerns interested in public safety. Consisting of a BOARD with typical street intersections on one side. The other side is a BLACKBOARD on which any street or road situation can be drawn with chalk and then erased. It has scale models of vehicles, traffic markers and accessories that can be placed in any conceivable traffic situation.

Write for our folder. It contains full information.

MAGNO SAF-T BOARD© EMIGSVILLE, PA.

Circle Item No. 8—Reader Service Card

NEW... SAFETY EQUIPMENT

Publication of product announcements in this section should not be construed as endorsement or approval by the National Safety Council.

Safety Shield

The "Shield of Safety" replaces the "Green Cross for Safety" emblem shown in a new catalog. For those who have earned a National Safety Council award and wish to supplement this award with additional trophies or plaques, permission can be obtained from the National Safety Council for use of the "Green Cross" for Safety emblem.

The "Green Cross for Safety" emblem is still available on individual incentive, safe driver or safety awards.

William Jewelry & Manufacturing Co., Dept. TS, 10 S. Wabash Ave., Chicago 3, Ill. (Item 41)

Rock Salt

Rock salt for ice control will be marketed under the new name of "Safe-T-Salt." Public safety is the basic reason for salting streets and highways and the salt was named to explain this function.

"Safe-T-Salt" was designed to make public officials' public relations job easier because it reminds the public of the primary reason for salting treacherous pavements and helps promote individual effort to reduce winter driving hazards.

"Safe-T-Salt" is a screened, economical grade of rock salt available in bulk or in a newly designed black and yellow bag.

Morton Salt Co., 110 N. Wacker Drive, Chicago 6, Ill. (Item 42)

Flasher Terminal Clips

Kay-Lab Stop-It in-line flashers are now fitted with terminal clips. Instead of splicing a flasher into a connecting wire, the terminal clips simply plug into already installed flasher receptacles. The replacement can be made in seconds.

The flashers are made for 6, 12 and 24-volts systems with a choice of a fast flash of 90-100 flashes per minute for directional signals, or the slow flash of 60-65 flashes per minute for law enforcement or emergency vehicles.

Macchi & Co., 819 Valencia St., San Francisco 10, Calif. (Item 43)

Driver Training Aid

"Perception of Driving Hazards—Part III—Highways and Byways" is a new training aid designed to help drivers spot traffic hazards and avoid accidents. The aid shows hazards on ordinary highways and secondary roads.

The training aid completes a three-part series which gives driving instructors a set of visual aids covering the full range of driving conditions found in the United States.

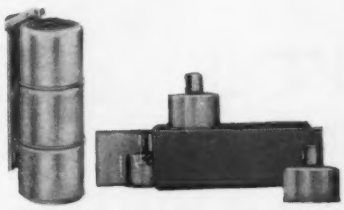
The first in the series showed hazards in city traffic and on suburban streets and the second on high speed expressways and highways.

The aid is intended for classroom and other instructional use and involves a "flash-screen" technique to show traffic hazards as they would appear from the driver's seat of a car approaching a potential danger. Actual traffic scenes are flashed on a screen for a few seconds and viewers are asked to spot hazards and tell what avoidance action they would take.

The chief advantages of the technique are the development of speedy perception and a sharpening of interest in safe driving. The photo technique permits teaching an important phase of traffic safety to as many as 30 students at once and indoors. This supplements and facilitates the conventional individual training in a car.

The training aids and manuals are offered to high schools, corrective driving clinics, industrial fleets, and safety organizations.

Shell Oil Co., 50 W. 50th St., New York 20, N. Y. (Item 44)



All Weather Flare Kit

V-3 Bracketed Flare Kits and CC-30 Boxed Flare Kits meet I. C. C. and state regulations for oil burning flares, and are U. L. approved. Weather designed and tested, the flares will withstand 45 mph winds and burn brightly in rain or snow. Both flare kits are leakproof and are constructed of heavy gauge steel.

The V-3 features a retractable burner, assuring a primed wick for instant lighting. A snuffer cap and flag staff socket are on each flare, and the unit comes complete with a rigid flat bracket and retainer arm and pre-drilled mounting holes.

The CC-30 Oil Flares utilize a fixed type burner. Cap is a triple bayonet lug snuffer with grip chain and flag staff socket. All three flares fit snugly in a compact double flanged box with an easy end opening. There is space in the box also for fuses and flags as required.

R. E. Dietz Co., 225 Wilkinson St., Syracuse 1, N. Y. (Item 45)

SAFETY PRODUCT LITERATURE

Traffic Counter

The PF Traffic Counter and Data handling equipment now allow large-scale traffic studies; traffic data is converted into a form that is compatible with any computer reading unit, without manual handling of any kind. With punched tape, a permanent record is made that cannot be destroyed by water or any means short of destroying the tape itself. The manufacture claims the punching operation is simple, rugged, and impervious to the hardest abuse. The tape can be converted to typewritten form, punched cards, or standard punched tape with an FP translator. The portable unit is powered by a 6-volt dry cell battery, the entire package weighs 40 pounds. Fischer & Porter Co., Warminster, Pa.

For more details circle No. 81 on enclosed return postal card.

Traffic Signs

Ready Made Sign Co., Inc., 115 Worth Street, New York 13, N. Y., announces the publication of their latest catalog of stock signs. In addition to standard industrial signs it includes signs covering Traffic, Civil Defense, fire prevention, radiation, and a wide collection of signs for every business need.

For more details circle No. 82 on enclosed return postal card.

Brake Fluid

This heavy-duty brake fluid is manufactured to withstand the high temperatures encountered in late model passenger cars, and truck and bus brake systems. Available in 12 oz., quart and gallon cans, and 5-gal., 30-gal., and 54-gal. drums. Raybestos Div., Raybestos-Manhattan, Inc., 61 Willett St., Passaic, N. J.

For more details circle No. 83 on enclosed return postal card.

Safety Valve for Air Brakes

Protects against air pressure loss by closing off broken line automatically. Actuation depends on final pressure of braking system rather than high flow or leakage rates. Operates from 10 psi to maximum compressor pressure. Hydro-Aire Co., Div. of Crane Co., 3000 Winona Ave., Burbank, Calif.

For more details circle No. 84 on enclosed return postal card.

Warning Device Regulations

A new twelve page booklet summarizing contractors' responsibility for providing safety devices, warning lights, torches, lanterns, and signs, according to the law of various states, is available from the R. E. Dietz Co., 225 Wildinson Street, Syracuse, N. Y.

For more details circle No. 85 on enclosed return postal card.

Mercury Luminaires

Bulletin GEA-7210, ten pages, describes the General Electric mercury luminaire for residential street lighting. Included is a discussion of mercury lighting advantages, a description of the radical new refractor lens design, easy lighting layouts with application data and ordering information. Photos include cutaway view of new luminaire, applications and dimension drawings. General Electric Co., Schenectady 5, N. Y.

For more details circle No. 86 on enclosed return postal card.

Street Signs

This catalog gives full specifications and prices for signs, blanks, accessories, hardware, posts and bases for street name and traffic and warning signs. Municipal Street Sign Co., Inc., 128-20 14th Ave., College Point, Long Island, N. Y.

For more details circle No. 87 on enclosed return postal card.

Voice Gun

Used wherever easy and effective control of groups or crowds is desired. Model A-12 weighs only 3¼ lb. and is a self-contained public address system consisting of microphone, transistor amplifier, speaker and power supply, all in one unit. The manufacturer claims that in tests the voice gun proved virtually unbreakable. Dropped from platforms and ladders and onto concrete pavements without damage, other than slight surface scuffing. It is designed to function equally well in heat or cold. Wm. A. Holmin Corp., Rockford, Ill.

For more details circle No. 88 on enclosed return postal card.

Tire Gage

A device for measuring buffed tires and matching truck duals on or off the equipment is being marketed nationally by Monarch Mfg. Co., Berkeley, Calif. Said to measure tire diameters to within 1/64 in. accuracies, the one-piece vernier-type scale is placed around the tire and drawn firm with two convenient knobs. The actual circumference is computed by the scale into diameters.

For more details circle No. 89 on enclosed return postal card.

Portable Winch

Bulletin M-60, available from City Engineering Co., Inc., Indianapolis, Ind., describes their My-Te portable electric winch and hoist. Designed to lift 2500 lb. and pull 5000 lb. This 60-lb. unit mounts with just six bolts and works off any 6 or 12-volt battery to handle a wide variety of lifting and pulling jobs. The drum holds 150 ft. of ¼" cable and operates at 32 rpm.

For more details circle No. 90 on enclosed return postal card.

Aluminum Hardware for Signs

California Metal Enameling Company, 6904 East Slauson Avenue, Los Angeles 22, Calif., announces their all-new, all-aluminum hardware for street signs. Featured is a "theft-proof" saddle cap, which replaces the old finial-type assembly. Also included in the assembly is the star-shaped ¾ in. extruded center rod. The 8-pointed star shape makes a positive and simple method of adjusting the angles of the sign faces. Matching holes in extruded saddles lock the rod in place. Available for top of poles criss-cross, cantilever, and cantilever criss-cross at sides of pole. All types are said to fit both 6-in. and 9-in. plates and be competitive with steel and other commonly used hardware metals.

For more details circle No. 91 on enclosed return postal card.

Optical Pointer

Perfected by Wald Industries, Inc., Huntingdon, Pa., this optical pointer fits below the windshield of the striping machine cab. It is said to be especially practical in confined city projects where the projecting guide tends to be unwieldy. It allows the operator a choice of reference line such as the medial strip, edge line, or center line.

For more details circle No. 92 on enclosed return postal card.

Aluminum Lighting Standards

Catalog ALS-5, 16 pages, with detailed drawings of Pfaff and Kendall Aluminum Lighting Standards, is written more as an engineering handbook than a sales catalog. Data in the publication is designed to help the traffic lighting engineer match the lighting standard with the luminaire to provide the desired light intensity for a wide range of applications.

For more details circle No. 93 on enclosed return postal card.

Pavement Marking Material

The "SD" Plastix manufactured by Prismo Safety Corp., Huntingdon, Pa., is said to have a special adhesive backing that permits simple, quick application by unskilled labor. No advance preparation of the pavement is required. Traffic flow can continue while the installation is being made, ending long waits required for marking materials to dry or set.

For more details circle No. 94 on enclosed return postal card.

Electronic Warning Signs

Surgelites combine electronic flashing lights with neon letters that spell out a continuous warning. Literature reports they can be seen flashing 300% sooner than conventional warning lights. Electronic Lights, 1713 Ashland Ave., Chicago 22, Ill.

For more details circle No. 95 on enclosed return postal card.

Street Sweeper

This 4-wheel, Twin-engine street sweeper is said to offer outstanding performance with economy, whether at work on residential streets, congested downtown areas, park or airports. Maintaining full broom speed at all times under all conditions. Mobil Sweeper Div. of the Conveyor Co., 3260 East Slauson Ave., Los Angeles 58, Calif.

For more details circle No. 96 on enclosed return postal card.

Traffic Markings

Released by Veon Chemical Corp., 22-09 Bridge North, Long Island City 1, N. Y., this 16-page brochure describes their Perma-Line pavement markings. Shown are the latest installations of these traffic control devices with complete specifications.

For more details circle No. 97 on enclosed return postal card.

Virginia Inspection

From Page 43

should not be overlooked is composed of the I-keep-my-car-in-good-condition-without-inspection drivers. They no doubt do, and this is commendable as safety authorities urge between-period checks for older cars and before long trips. In so thinking, however, these drivers succumb to a fatal philosophy. One does not have to be at fault himself to die in a traffic crash but can die through the blatant fault of someone else. A mechanically perfect car can be wrecked and its riders killed by an irresponsible driver at the wheel of a fugitive from a junk yard.

In the final analysis, it appears that the public and many of the administrators are interested in an inspection program from the standpoint of the value to traffic safety versus the tax dollars spent. In this regard, in Virginia, we can point to a 55 per cent reduction in defective vehicles involved for a cost, in 1959, to the state of 4.6 cents per inspection. This cost includes the total cost of administering the program and the supervision by police personnel in the field. Perhaps there is no other traffic safety program that can show as much improvement for so few pennies per registered vehicle.

Virginia's program includes an inspection of the brakes; headlamps; tail, stop and rear turn lamps; parking and front turn lamps; auxiliary lamps; clearance or marker lamps on commercial vehicles; steering; tires; rear vision mirrors; horns; windshield and other glass and glazing materials; windshield wipers; exhaust systems; air conditioners, and seat belts. The fee allowed by statute for this inspection is $1.00. If the vehicle meets the requirements for these items, an approval sticker is placed on the windshield. If it fails to meet the requirements, the vehicle may be repaired at the inspection station or at the owner's discretion at some other place of repair. When the deficiencies have been corrected, the vehicle must again be checked before an approval sticker is issued.

To further point up the place of inspection in traffic safety, the report of the Committee on Engineering and Vehicle Inspection, adopted at the 27th Annual Conference of the American Association of Motor Vehicle Administrators at Portsmouth, New Hampshire, on October 9, 1959, read, in part:

"VEHICLE INSPECTION

"Your committee urges that . . .

"1. The AAMVA lend its best efforts to acquaint public officials and educate motorists with the needs for periodic inspection.

"2. Encourage the adoption of periodic motor vehicle inspection laws and the activation of a sound inspection program.

"3. Develop promotional material on periodic inspection to create interest in those states which do not now have an inspection program and to maintain continued interest in those states where an inspection program is active.

"The committee plans to continue its cooperation with the automotive manufacturers in their efforts to develop a sound inspection procedure manual which might be used as a basis for uniform regulations on how to inspect a vehicle and when it should be rejected.

"It is a well recognized fact that exposure to traffic accidents increases in relation to the increase in motor vehicle registrations and traffic flow. In spite of this, the periodic inspection of motor vehicles, a program designed to aid in reducing the number of defective vehicles on our highways, continues to be slow. At the writing of this report, the committee has no information indicating that an inspection law had been enacted in any additional states. Since only 15 states and the District of Columbia have an active safety inspection program and since a number of bills were introduced, but failed, there appears to be a very definite need on the part of the public and the officials of each state to better understand the part that periodic inspection of motor vehicles plays in traffic safety. (*Mississippi and Louisiana have since enacted inspection laws.*)

"It has frequently been said that a

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eliminates human error in speed control

There can be no "benefit of the doubt" for speeders checked by the Speedalyzer—simply because radar leaves no doubt. Its range is 0 to 100 miles per hour, and it is effective on cars from 100 to 600 feet away, trucks and buses up to 1500 feet. Speeders are unerringly detected passing in either direction. The SPEEDALYZER has five components: (1) an amplifier with compact **transistorized** power supply; (2) a power cable; (3) a meter with attached cable; (4) an antenna which can be aimed in any direction; (5) a 65 miles-per-hour tuning fork. Total weight is about 20 pounds.

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Circle Item No. 9—Reader Service Card

state should not embark upon a motor vehicle inspection program until all of the phases of that state's traffic safety program have reached an acceptable level. Your committee urges that officials discard this philosophy immediately and recognize that motor vehicle accidents can result from only three causes—defective highways, defective vehicles, and human errors—and that failure to use any of these avenues of approach prevents a state from reaching the optimum results in its traffic safety program. Accidents and inspection statistics continue to point out a very definite need for this phase of traffic safety and also clearly indicate that the average motorist will not voluntarily exercise preventive maintenance control over his vehicle."

The statement "Your neck is no safer than your car," might be classified "tremendous but trite." Nevertheless, it is true.

Since inspection programs are active in such few states, it is obvious that this is a fertile field for improvement in traffic safety.

Springfield

From Page 12

sufficient width for new or widened streets and highways as called for in the circulation plan. To date, more than $400,000 worth of streets and thoroughfares right-of-way has been dedicated in accordance with the plan.

The standards include specific requirements for "building in" traffic safety features. For example, access points to main highways are limited in number. By suggesting the redesign of intersections the staff has been able to eliminate a number of potential points of traffic conflict and accident hazard. Long blocks are encouraged to further cut down the total number of intersections. No lots may have direct access onto major thoroughfares. Service roads are provided or lots are backed onto the thoroughfare with adequate depth for screen planting. By this provision more than 180 curb cuts or other hazardous intersections have been eliminated from preliminary plots submitted over the past three years.

Except in rare instances, such as estate-type developments, sidewalks are required in all new subdivisions. Traffic safety demands sidewalks in residential neighborhoods since walking and playing in the street is a major hazard. Streets are classified according to function. Minimum pavement width is 31 feet with curbs and gutters included.

Zoning. There are a number of ways zoning can be used for direct benefits to traffic safety. These include general control of land uses, setbacks, and density of population, and the regulation of roadside advertising and other conflicts.

One of the most important ways zoning has been of aid in Springfield is to help greatly in taking parking and loading off the street. A 1957 comprehensive amendment to an outdated zoning ordinance provided a formula of off-street parking and loading for every type of land use. For example, new or enlarged industrial plants must provide one off-street parking space for each five employes and adequate loading spaces depending upon their total floor area. The standards adopted were based upon local conditions following the suggested legislative guide and findings of a national survey by the Eno Foundation for Highway Traffic Control.

While the parking problem in Springfield is far from being solved, it would be an even greater problem today if new business and office structures had not provided their own parking and loading areas during the past three years. Zoning has been used as an effective instrument to assure "pay-as-you-go" parking in a uniform, impartial way at no extra cost to taxpayers.

Urban Renewal. Early studies of Springfield's renewal project indicated that solutions would have to be found for traffic problems as well as housing problems if basic planning and renewal objectives were to be met. The 250 acre neighborhood selected for renewal efforts is bisected by two one-way state route highways and other through streets. The one-time sound neighborhood is cut into several small pieces with heavy traffic volumes resulting in excessive noise, dirt and danger. A study of traffic accidents

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236 High Street, Newark 2, N. J.
Circle Item No. 10—Reader Service Card

shows a pattern of concentration at through-street intersections and virtually no accidents at one area where a neighborhood park has caused streets to dead end.

The adopted general neighborhood renewal plan calls for a relocation of the state route to the edge of the residential area and right-of-way for this improvement has been reserved in the "pilot project" recently cleared. Collector and minor streets have been redesigned to discourage their use by through traffic. This has been done by converting the present grid-iron street system into loop streets and super-blocks and by adding intentional minor street diversions. A few local streets without lot frontage will be converted to "pedestrian-ways" leading into the future school-park-playground site. When completed, it will be possible for children to reach the public areas from each home without once crossing a through street.

Many people are working to reduce traffic accidents in Springfield and Sangamon County. The combined efforts of the police department, traffic engineering, citizen groups and the Illinois Division of Traffic Safety is paying off. With an increase in the number of vehicles and miles driven, total accidents were reduced 12 per cent last year. Deaths resulting from traffic accidents were cut by one-third last year.

It is impossible to determine how much credit for this improvement should be given to the "built in" safety resulting from comprehensive planning. A true evaluation will take much more time than the present four year trial. But everyone concerned with the project feels that accident reduction will be greatly improved by using more foresight in planning.

A five year study of 86 subdivisions made by the Eno Foundation proved that good design can cut the accident rate from 77.7 to 10.2. This study was mainly a comparison of grid-iron streets to well designed curvilinear streets. Possibly the accident rate can be reduced by more than eight times if the planning tools discussed are brought into full play.

Sound planning and the use of the tools available, such as zoning, subdivision standards and urban renewal, could be the most powerful instruments yet found to assure safety on our streets and highways.

They Like to Live

From Page 26

during an annual teen-age safety conference. And every April at the city's annual home show thousands of leaflets distributed directly to school children, to teen-agers, and to parents stress street safety.

Once a year, under sponsorship of the Junior Chamber of Commerce, traffic safety inspection lanes are set up at two points in the city. Publicized beforehand and maintained by Jaycees and boy scouts, the lanes are handled by experienced mechanics from the shops of the city's new car dealers. This year 24 per cent of the cars traveling through the lanes were found defective in some respect. Corrected upon early discovery, these defects were thus eliminated as possible contributing causes to future accidents.

Looking at the maps on his office wall—which show, in addition to the good record in traffic safety, that no deaths from drownings have occurred in the city in recent years, that only one industrial fatality has occurred, and that there are only a few fires in town—Hatcher of the Safety Council is tempted to state that there is a "climate for safety in St. Joseph."

Police, looking over maps and statistics from the angle of number of accidents which have happened, may not be so sure that a climate for safety has yet been achieved here.

But, by their actions, all seem to agree that much can be done to cultivate this climate—and that one of the best methods for doing so is to constantly talk about it to all the men and women who like to LIVE in St. Joseph.

Be a responsible citizen. Vote for the candidate of your choice.

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- Portable School Flashers
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Circle Item No. 12—Reader Service Card

Drivers Take Bow

From Page 33

other equipment were loaned by the Department of the Army. The Roadeo was extended to include the drivers of six post offices in the New York City area and the "stimulators," the drivers of the Long Island Truck Routes, were the host for the 1959 Postal Roadeo.

The contest events were expanded to include two-ton trucks and half-ton courier (station wagon) sedans, in addition to the tractor-trailers.

The participating organizations represented 5,500 drivers. Selected from these for roadeo competition were 34 champions.

Our period of elimination was established as April 1 to April 1 the following year, which was identified as our Roadeo Year. American Trucking Association and Department of the Air Force rules were used to establish rules which best fitted our postal roadeo. All contestants had to qualify for the National Safety Council Safe Driver Award from the beginning of the Roadeo Year to the day of the contest.

The 1959 postal roadeo made this type of sports activity a family affair. The spectators were the families and friends of our champions and Pop was the hero.

The important part of our 1959 roadeo was that the roadeo committee members were now professionals. The organization clicked and everything ran smoothly. Also, the family had become an important part of this activity.

Our next contest would have to be a colossal production or a colossal failure. E. J. Quigley, postmaster, Brooklyn, met the challenge and accepted the honor of host for the 1960 postal roadeo. The drivers of three more post offices in the Greater New York City area were invited to participate and the contest events were expanded to include ¾ and three ton trucks. Families were to be given major consideration and roadeo day would be an outing for all.

Our Roadeo Year, April 1, 1959-April 1, 1960, was the period of elimination. Drivers with preventable accidents or moving traffic violations both on or off duty were eliminated first. Simulated traffic conditions, as they applied to roadeo events, were developed and brought to the attention of all drivers for day-to-day practice. Each participating unit conducted its individual roadeo elimination contest with regulation roadeo field events. Thirty-one champions were selected for competition.

In addition to competing for first and second place, unit teams would compete for high score tractor-trailer team and high score straight truck team. In addition to the winning trophies, all participants would receive engraved roadeo belt buckles. Local police and private organization representatives volunteered as judges. Postal officials extended full support.

Capt. William B. Short, Jr., commanding officer, Floyd Bennett Naval Air Station offered the hospitality and facilities of his station. Spectator stands, picnic areas, a static display of aircraft and other facilities were made available. Postal employe groups donated funds for free hot dogs, Pepsi-Cola, milk, ice cream and a victory dinner for the roadeo winners. The Brooklyn Post Office Band and Color Guard were on hand to lend necessary color.

More than 2,000 spectators witnessed the events. The contest started at 8:30 a.m. and was concluded at 4:30 p.m.

Outstanding was the sportsmanship of the losers. They cheered a perfect score even for a competitor. Our 1959 tractor-trailer champion Melvin Slack was the last contestant in that class. The previous contestants watched and cheered as each perfect move was made. When Slack made a perfect score on the last event, the Stop Line, the cheers and hurrahs were a clear indication that he had done it again. A happier man never left a tractor cab to be almost bodily carried off the field by the men with whom he had competed.

The following quote from the American Trucking Association's 1960 truck roadeo rules pretty well sums up our feeling about our own 1960 roadeo,

"To those who heard an enthusiastic crowd heckle and cheer while neatly uniformed drivers backed their heavy vehicles into simulated parking spaces and loading platforms, there can be no doubt of the popular appeal this type of event can have."

ADVERTISER'S INDEX

Beam's Mfg. Co.	3
Calumet Steel Castings Corp.	49
Flex-O-Lite Mfg. Co.	B.C.
Ford Motor Co.	3
Graubards, Inc.	48
Heylmun, Stanley L., Inc.	50
Magno-Saf-T-Board	44
Morton Salt Co.	I.B.C.
Muni-Quip Corp.	49
Porto-Clinic, Inc.	5
Prismo Safety Corp.	I.F.C.
Stephenson Corp.	47
Wagner Electric Corp.	42
West Side Iron Works	6
Williams Jewelry & Mfg. Co.	43

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Here's how to use card #2—the first set of numbers is keyed to products advertised throughout the magazine, the second set to items shown in the New Product section and the third set to the Safety Products Literature section. Simply circle the number of any item in which you're interested and we'll ask the manufacturer to send you full information without obligation. No postage is required when the card is mailed in the United States.

Advertised Products

—are included for your benefit to help you solve accident problems. To get full information on a product in which you are especially interested, circle the corresponding page number on the Reader Service Postcard.

New Safety Equipment

—shown in the special section, has been carefully reviewed. Only new products or newsworthy improvements in existing equipment are considered eligible for inclusion in this listing.

Safety Product Literature

—are catalogs, brochures, spec sheets and booklets describing equipment and services to help you solve your traffic safety problems. You can build a valuable reference file with these free publications.

IMPORTANT—Be sure to fill in your name, organization and address in the space provided on this side of the post card.

1

NOVEMBER, 1960

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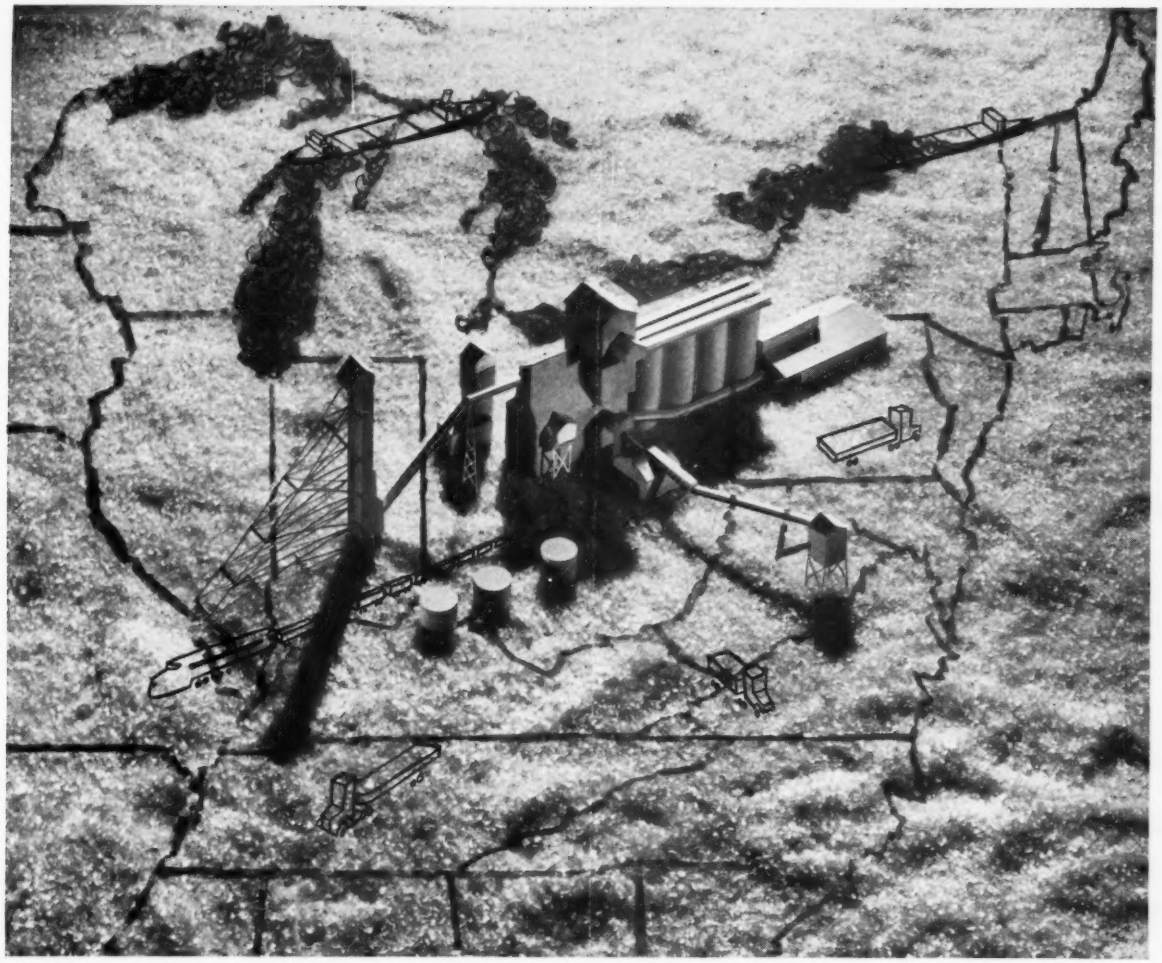

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